

Social Interactions and Social Relationships Between Children with  
and without Disabilities: Shifting the Focus

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## Loss

by Ann Macfarlane

I feel teardrops trickle through  
     nearly half a century  
 For the loss of touch.  
 It is something gentle,  
     warm, intimate, exciting,  
 Being touched?  
 Does it contribute towards  
     that feeling of  
 Being loved?  
 I taste the saltiness of tears  
     engulfing the years  
 For the loss of sexuality.  
 Is it something sensual,  
     self-defined, empowering?  
 Does it allow the sensitivity  
     of being a woman  
 To be acknowledged?  
 I expose a stormy outburst of emotion  
     marking almost half a century  
     of anger  
 For the loss of relationships.  
 Are they something experienced only  
     by non-disabled people?  
 Belonging, being welcomed as  
     part of family, community, society?  
 Let me give expression to  
     Almost a lifespan  
     of isolation, of painful separations.  
 Let me not be ashamed in grieving  
     for the loss of touch,  
     love, sexuality, personal growth  
 As I search and reach out  
     for inclusion.

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## Abstract

This study is based on fieldwork carried out between October 1995 and December 1996 and has two dimensions. The first dimension reflects the study of social relationships between children with and without disabilities in the regular school setting. The second dimension reflects the process involved when moving from quantitative to qualitative research methodology.

This research is presented as three case studies. The first is a behaviourist case study that utilised a peer-training intervention to improve social interactions and social relationships between a six year old boy labelled 'severely disabled' and his regular classroom peers. An increase in the number and length of interactions raised some important questions about the context of social relationships. Two qualitative observational case studies then followed, with the focus on social relationships, especially the structures and people that shape and influence them in the school setting.

In the first of the qualitative case studies, the first and over-riding theme was the influence of the school structure. The second theme was the opportunities to interact available to the children in the classroom and the playground. The characteristics of the social interactions and relationships that I observed between a seven year old girl with a disability and her peers were the third theme. In the second qualitative case study three themes also emerged. The first was the role the school played in children's social relationships, the second was the opportunities available to the children to interact and the third theme was the characteristics of the social interactions and relationships that I observed between an eight year old girl with a disability and her peers.

## CHAPTER ONE

### Introduction

It is everyone's dream to have genuine, warm and caring relationships with people both within and outside the family. A common nightmare would be to be isolated and disconnected from other people. Schooling provides the opportunity for children to develop relationships with other children and indeed friendship plays a large part of children's lives at school. Unfortunately not all children enjoy secure meaningful social relationships. Research carried out in New Zealand suggests that approximately ten percent of preschool and primary school children have no friends, while a further twenty percent have only one friend (Townsend, 1992, p.11).

Research findings have suggested that children with disabilities are more likely to experience some difficulties in their social relationships. Specifically, research has highlighted that children with disabilities have been poorly accepted and/or socially rejected by their peers without disabilities (Gresham, 1986). This is a concern as "repeated failures to build peer relationships and the absence of appropriate models for establishing productive patterns of social exchange with other children may well damage both social motivation and social skill development" (Guralnick, 1986, p.113). For children with disabilities an inclusive school environment is necessary for meaningful relationships to develop.

The aim of inclusive education is to create learning environments in which students naturally interact with one another through talking, sharing, and working together. Within these environments, differences are acknowledged and there is a sense of acceptance and valuing of people. The role of the teacher is to reinforce the community spirit within the classroom and to assist class members to become more co-operative and understanding of each other's individual characteristics. The school is part of the wider community, and it is through being a member of this community that skills can be acquired and friendships can emerge (Ryba, 1995, p.54).

This definition of inclusion states that friendship is an important component of inclusion. This is because social relationships play a significant role in a child's development. The social relationships that children form with other children are important for cognitive, social, behavioural, communicative and

emotional development. Recent research has attempted to identify the benefits of friendship and it has been found that friendship can foster the growth of social competence, provide emotional security in difficult and threatening situations, serve as a source of intimacy and affection, provide guidance and assistance, provide a sense of reliable alliance, and provide companionship and stimulation (Asher & Parker, 1989, p.6). Therefore if children can experience meaningful social relationships with other children they will acquire the necessary social skills to form relationships with other people of differing ages and social power.

Asher and Parker (1989) claim that "children having peer relationship problems miss out on important functions that friendships serve in children's lives" (p.6). Children who are rejected by other children or who have poor social relationships are at increased risk of developing problems later in their lives (Hartup, 1989). These problems may include anti-social behaviour, academic failure, juvenile delinquency, school dropout, and poor mental health in adolescence and adulthood (Roff, Sells, & Golden, 1972; Cowen, Pederson, Babigian, Izzo, & Trost, 1973). Research also indicates that "poorly accepted children are lonelier and feel less satisfied not only with their peer relationships in general, but with the friendships that they do have" (Asher & Parker, 1989, p.6). More recent studies provide evidence to support this (Amado, 1993; Margalit, 1994).

The importance of children's social relationships is reflected in the amount of research that has been published on this topic. Research on children's social relationships came into the fore during the late 1920s and continued to the end of the 1930s, when a number of classic studies were published. As might be expected, research on children's social interactions declined significantly during the war. After the war, research on children's social relationships was revived, but the intensive observational studies of children that had characterised research during the 1930s did not continue with the same intensity. Consequently from the end of the 1930s until the early 1970s, research on children's social relationships and social development was scarce (Renshaw, 1981). Research on the social relationships of children with disabilities was scarcer still. However, since the early 1970s research and interest in this area has been increasing. The revival in the 1970s led to a focus on the social acceptance of children with disabilities by their peers in both regular and segregated settings. One reason for the revival in research on social relationships of children with disabilities was due to the increasing

number of children with disabilities who were in the mainstream of regular classrooms.

Generally, there are two broad perspectives on the difficulties in establishing relationships between people with and without disabilities. These are the psychological and the sociological perspectives. The psychological approach is based on the social skills perspective where the person with the disability is seen to lack the necessary social skills to develop relationships. The sociological perspective however, states that these problems rest with society which discriminates against people who do not comply with society's rules and norms and therefore defines them as deviant (Lutfiyya, 1990).

The present study explores the social interactions and relationships between three primary school-aged children with severe developmental disabilities and their peers in three regular classrooms. This study incorporates two approaches. The approach in the first case study follows a traditional behaviourist special education diagnosis and intervention approach to promote successful social interactions between a boy with a severe disability and his school peers. The subsequent two case studies incorporated a more contextual approach using a qualitative methodology to study the social relationships between two girls with disabilities and their school peers.

## CHAPTER TWO

### Review of the Literature

#### Historical Context of Mainstreaming in New Zealand

I will begin by looking at mainstreaming development and policy in New Zealand and the implications of this for research on social interactions and relationships between children with and without disabilities. Research suggests that New Zealand has been influenced by special education policy in other countries, such as the United States and the United Kingdom. Historically in New Zealand and the rest of the western world, children with disabilities have been shielded from all aspects of society, with education being no exception. Usually, children with disabilities were educated in segregated education facilities, in clinics, through correspondence schooling, homeschooling, or in specialised units and classes attached to schools. The Education Act 1964 did not require the state to provide an appropriate education for children with disabilities, and did not specify that these children should be educated alongside their peers without disabilities (Mitchell & Mitchell, 1987, p.108). It was not until the 1989 Education Act that it was first stated that all children have the legal right to be educated in state schools. Section 8 of the Education Act 1989 states the following:

"People who have special educational needs (whether because of disability or otherwise) have the same rights to enrol and receive education at state schools as people who do not."

Section 3 of the Education Act 1989 states that all students between the ages of 5-19 years are entitled to free enrolment and education in any state school. There are exceptions, however. The first is when the Secretary of Education agrees with a student's parents that a student should be enrolled at a particular state school, special school, special class, special clinic or special service. The second exception is when the Secretary directs the student's parents to so enrol the student. In the second instance, parents have the right to have such a direction reconsidered through a system of arbitration (Mitchell, 1995, p.16).

As a direct result of legislation, Boards of Trustees were required to include the following goal in their charters:

"To enhance learning by ensuring that the school's policies and practices seek to achieve equitable outcomes for students of both sexes; for rural and urban students; or students from all religions, ethnic, cultural, social, family and class backgrounds, irrespective of their ability or disability".

(Department of Education, 1989)

The Education Amendment Act 1991, however, gave schools the right to accept students of a particular kind or description when 'there is likely to be overcrowding at the school'. Mitchell (1995) suggests that there is evidence that some schools have been using this provision to exclude students with special educational needs (p.16). Section 57 of the Human Rights Act, 1993, provides a further loophole for schools to exclude students with disabilities. The act:

"prohibits educational establishments from refusing or failing to admit a student with a disability; or admitting such a student on less favourable terms and conditions than would otherwise be made available, except where that person requires special services or facilities that in the circumstances cannot *reasonably* be made available"

(Mitchell, 1995, p.16).

Ministry of Education figures show that in the last five years there has been an increasing demand for places in regular school classrooms for children with disabilities. This is the result of children with disabilities entering school for the first time and children transferring from special schools and special classes. At 1 July 1995, there were approximately 19,130 students receiving some form of special education support, representing 3 percent of the school population. Approximately 65 percent of these special education students, 12500 children, were enrolled in regular classes. The number of special education students in regular classrooms increased by about 12 percent from 1994 to 1995. Seventy-one percent of all New Zealand schools had at least one special education student. These figures show that there are a large number of children with severe developmental disabilities in regular classes. It is possible that a significant number of these children are having difficulties with social interactions and social relationships with their peers without disabilities.



### Mainstreaming and Social Relationships

Mainstreaming was a major development in the field of special education and was seen as the answer to the deficiencies in the social acceptance outcomes of children with developmental disabilities. Research that investigated social interactions between students with severe intellectual disabilities (aged 3-22) and students without disabilities in both integrated and segregated settings was conducted by Brinker in 1985. The results were significant because they showed that the rate of initiations directed by the student with a disability to students without disabilities, and vice versa, was significantly higher in integrated than segregated social groups. There were also more positive social interactions in the integrated than the segregated setting. Students without disabilities responded to initiations from students with disabilities more frequently than did other students with a disability. The children were involved in more social interactions, and the quality of the interactions was better. Negative interactions were seldom observed, the majority of the social interactions were neutral. A criticism of this study is that each student was observed for only a total of eighty minutes.

However, the assumption that mainstreaming would solve all problems was problematic because, as Gresham (1982) elucidates, mainstreaming was based on three false assumptions. The first false assumption was that the physical placement of children with disabilities in regular classrooms would automatically increase social interaction between children with disabilities and those without disabilities; this became known as the 'contact' theory. The second false assumption was that the placement of children with disabilities in regular classrooms would result in increased acceptance of children with disabilities by their peers without disabilities. The third false assumption was that children with disabilities who were integrated into regular classrooms would model or imitate the appropriate behaviours of their peers without disabilities (p.201). It was assumed that through observational learning and ongoing interactions with their peers without disabilities the social behaviour, including the frequency and quality of social interactions, of children with disabilities would improve significantly (Guralnick, 1986). Research has, however, shown the above assumptions to be generally untrue. The social outcomes of mainstreaming for children with disabilities have generally been disappointing and have done little to improve the social competencies of these children.

The main purpose of educating all students in the mainstream is to provide each student with opportunities to learn to live and work with peers in natural, integrated, educational and community settings (Stainback & Stainback, 1992, p. 5). Since the 1980s, the move to include all students in regular classrooms has gained momentum for two reasons. The first reason is that with support it benefits *all* students, those with disabilities and their peers without disabilities. When appropriate educational programmes and support are provided, the student with a disability learns more than he or she would in a segregated setting. Additionally, with adult guidance, students can learn to understand, respect, be sensitive to, and grow comfortable with individual differences and similarities among their peers. Students can learn to interact with and become friends with each other (Stainback & Stainback, 1992, pp. 5-6).

The second reason to include all students in the mainstream is to avoid the negative effects of segregation. Wade and Moore (1992) discuss the disadvantages of segregation. They cite Thomas (1978) who examined and put forward a number of disadvantages in the segregation of children with disabilities: First, it places them in a social system largely composed of others with similar disabilities, so that they make the others their reference group. Second, it means a loss of contact with normal peer groups and all that this implies for psychological and social development. Third, the children lose friendships in their home neighbourhood. Fourth, there is a sense of stigma. To these disadvantages, Wade and Moore (1992) add that children without disabilities in mainstream schools lose the learning and social benefits derived from interacting with their peers with disabilities (Wade and Moore, 1992, pp. 15-16). It is important to remember that social relationships between children with and children without disabilities have benefits for *all* children, not just the children with disabilities. It also has positive effects on the community as a whole.

Merriam (1988) provides criteria for selecting articles for inclusion in literature reviews. She suggests including articles if the author of the source is an authority on the topic, if the article, book or review was recently published, if a particular resource or research study is relevant to the present research interest, and if the source is a thoughtful analysis, a well-designed study, or an original way of viewing the topic (p. 65). I have followed her advice and I have included articles and studies in this literature review from all these areas. I have examined predominantly overseas studies that include preschool, primary school and high school aged children with varying types

of disabilities, as there are limited New Zealand studies focusing on primary school children with severe developmental disabilities. It can be assumed that the reason for this is that children with severe developmental disabilities have been the last group of students to be integrated into regular schools, and in New Zealand have been excluded from regular schools by the 1991 Education Amendment Act, as described earlier. In many of the studies it was difficult to determine how the authors defined friendship, social and peer relationships and social interactions. These different concepts are all related, and seem to have been used interchangeably in some studies. This is why studies describing all of these concepts have been included in this literature review.

### Social Interactions and Relationships

In recent times research and educators have placed an emphasis on the importance of the quality and type of social interactions and relationships between children with and without disabilities. Amado (1993) states that it is "useful to look at the nature and quality of social interactions...social interactions initiated by others can be characterised as predominantly corrective, supervisory, and coercive; acknowledging, supporting, and empowering; or they can fall anywhere in between" (p. 69). Amado also suggests that the following questions regarding social interactions should be asked: "Does the person choose to interact with the people who are available and willing? What are the person's reactions to interactions initiated by available people - avoidance, evasion, aggression, and self-injury; boredom and listlessness; or approach, joyful participation, and thoughtfulness to their appearance?" (p. 70).

Participant observation and interviews were employed by Zetlin and Murtaugh in 1988 to compare the friendship patterns of high school students with disabilities with those of their peers without disabilities. The results were important as they showed that the students with disabilities generally had fewer friendships, with less intimacy, empathy, and stability within these friendships. The results also showed however that some students with disabilities did have friendships high in all of these qualities. Reasons suggested by the authors for the lack of friendships between these two groups of students included lack of out-of-school interaction with peers, the close and direct supervision of social contacts by families of students with disabilities, and placement in special programmes with other peers with disabilities.

Observations, peer nominations, and teacher and peer interviews were employed by Hall (1994) in a descriptive study that examined social relationships between children with disabilities and children without disabilities in four integrated classrooms. Of the four children with disabilities included in the study, two had Down Syndrome, one had cerebral palsy, and one had an intellectual disability. Results revealed positive relationships between the children with disabilities and their peers without disabilities. Some of the children without disabilities however (all girls), were described by the teacher or teacher aide as either a 'mother' or a 'boss'. An interesting finding was that none of the teachers or teacher aides stated that the child with a disability had a friend, but some of the children without disabilities described themselves as a friend of a child with a disability. This suggests that there may be a discrepancy in meanings of friendship between adults and children. The author when discussing interventions recommends that if a child with a disability needs strategies to increase social interactions, and that strategy involves a peer, then a child who has already developed a positive, social association with the classmate with a disability should be considered.

A study undertaken by Schwartz, Staub, Gallucci, and Peck (1995) is important because it made use of both quantitative and qualitative research methods to evaluate outcomes for children with moderate and severe disabilities in inclusive schools. From their data, the authors conceptualised three broad 'domains' in which themes were grouped. One of these domains was 'social relationships'. The authors observed that the children with disabilities in inclusive settings had many opportunities to develop a rich array of meaningful and important social relationships with their peers without disabilities. Four general patterns of relationships were found between children with and without disabilities. These were: play and companionship, helpee, helper, and adversarial. Play and companionship referred to a type of relationship where the children played together in a friendly manner. Helpee referred to a relationship in which the child with disabilities was the consistent recipient of support or assistance from a peer. Helper referred to situations in which the child with a disability was engaged in helping relationships for other children. Adversarial referred to negative social interactions and relationships, in which there was conflict between the students with disabilities and their peers without disabilities (p. 101).

### Frequency of Social Interactions

A literature review published by Odom and McEvoy in 1988 is valuable as it provides an overview of 22 studies published between 1977 and 1985. The authors investigated the patterns of social interaction between children with disabilities and children without disabilities. Their primary finding was that generally children without disabilities tended to interact more frequently with other peers without disabilities or peers who had only a mild disability rather than with peers with moderate or severe disabilities (p. 244). However, the authors state there were studies in the review that showed no differentiation in social interactions between children with and without disabilities. The authors warn that these results should be interpreted with caution. The children involved in the different studies had a range of disabilities (mild, moderate, and severe), were of varying ages, and the definitions of social interaction used in the different studies varied considerably.

Social interactions between preschool children with and without disabilities who were at different developmental levels were investigated by Guralnick in 1980. Observations occurred during integrated free play periods. Results showed: (a) children without disabilities and children with mild disabilities interacted more frequently with each other than expected on the basis of availability and less frequently than expected with children with moderate and severe disabilities; (b) children with moderate and severe disabilities interacted with all four developmental groups as expected using the criterion of availability.

Prosocial behaviours in an integrated setting were investigated by Honig and McCarron (1988), with the aim of determining which activity setting (free play, circle time, structured play, or gym) was the most conducive to prosocial interactions, which specific social initiations (sharing, helping, nurturing, cooperating, sympathising, and praise) were more likely to occur in which setting and what proportion of prosocial behaviours were child initiated rather than teacher directed. Both children without disabilities and children with severe disabilities were observed. Results showed that of the four different settings free play had the highest frequency of prosocial behaviours, and structured play had the second highest frequency. Sharing was the most frequent prosocial behaviour observed, cooperating was the second, helping was the third, and with very low frequencies were sympathy and praise, there were no observations of nurturing prosocial behaviours. Results also

showed that most of the prosocial behaviours were child initiated rather than teacher directed.

The participants in a study by Evans, Salisbury, Palom, Berryman, and Hollowood (1992) which investigated peer interactions and the social acceptance of children with severe disabilities in an inclusive school, were eight children described as having a severe or profound disability. The children ranged in age from five years through to eight and a half years. Classroom observations over a period of seven months provided data on the frequency and nature of the interactions. The authors also recorded social interactions of comparison students without disabilities. The coding system consisted of eleven categories of social interaction (assistance, discipline, play, conflict resolution, instruction, physical aggression, verbal aggression, physical affection, affiliative comments, attention-seeking behaviour, and talking). Results showed that the students with severe disabilities received more social interactions than they initiated, and that interactions initiated and received by the students with severe disabilities decreased over time. The children with disabilities were most likely to initiate social interactions as attention seeking and play. The data also revealed that the social interactions were not of the same types for the children with and without disabilities. The children without disabilities engaged in much talking among themselves, which led the authors to suggest that communication skills are critical to sustain classroom interaction for children with disabilities. A further finding was that a common form of interacting resembled parenting of the students with disabilities.

Hanline (1993) carried out an analysis of children's interactions. The participants were three children with profound disabilities aged 45, 58, and 60 months. The recorded behaviours were: initiations, responses, positive and negative behaviours, and termination behaviours. Hanline found that all interactions occurred between children with and without disabilities, no interactions occurred only between children with disabilities. The majority of the interactions for the children with disabilities were initiated by peers without disabilities. Within ongoing interactions, children with disabilities positively responded to peers without disabilities over half of the time. When children with disabilities positively initiated interactions, less than half were followed by a positive response from peers. Interactions were comparable in length to their peers.

Grenot-Scheyer (1994) studied the nature of interactions between students with severe disabilities and their friends and acquaintances without disabilities. Participants were aged between five and ten years of age and were videotaped during play sessions. An inventory was designed to measure both the quality and quantity of interactions. The inventory provided an overall frequency score of the number of initiations, responses, interactions and elaborated interactions and a frequency score of the number and type of affective behaviours. Results showed that the number of initiations for friends was significantly higher than for acquaintances. From session one to two the friends without disabilities increased their responses, whereas the acquaintances decreased their responses. Grenot-Scheyer highlights the need for further research that examines in detail the interactions between children with severe disabilities and their peers without disabilities.

#### New Zealand Research

Research carried out in New Zealand by Gibbons (1981) investigated social interactions between four children with Down Syndrome and their peers without disabilities, in mainstream preschool settings. Gibbons found that the number of social interaction episodes for the children with Down Syndrome did not differ greatly from that of their peers. Results also indicated that the overall patterns of social interaction (solitary activities, dominant interactions, co-operative interactions, and adult-child interactions) were similar for both groups of children.

Further New Zealand research conducted by Rietveld (1984) investigated the school adjustment of five children with Down Syndrome. Part of the research examined social interactions initiated by peers to the child with Down Syndrome, and social interactions initiated by the child with Down Syndrome to peers. Results showed considerable variability across the children, the mean rate of interactions per hour was 8.6 for initiations by peers, and 9.8 for initiations to peers by the child with a disability. Rietveld had comparison children without disabilities in each class, and she found that the contrast children initiated interactions two-and-one-half times as frequently as the child with Down Syndrome. Rietveld also conducted observations in the playground and found interesting results. Each of the five children with Down Syndrome engaged in more episodes of social play than the comparison children.

Rietveld (1989) carried out a follow-up study which examined in part social interactions in the classroom and playground for twenty-two children with

Down Syndrome. These children were aged from seven to twelve years. Classroom observations indicated that the children with Down Syndrome were initiating and engaging in social interactions as often as the contrast children without disabilities in the study. Results showed that the mean rate of interactions per ten minutes was 4.33 for initiations by peers, and 5.09 for initiations to peers by the child with a disability. This study provided valuable descriptive data on the qualitative nature of the initiations and responses.

### Summary

Unfortunately there has been a lack of research that provides an in depth analysis of the social interactions and relationships that do exist between children with disabilities and children without disabilities. It appears that too often simplified definitions are put forward that do little to describe in detail these complex interactions and relationships.

The overseas studies that examined social interactions between children with and without disabilities present results that suggest that generally children with disabilities have significantly reduced numbers of positive social interactions with children without disabilities. Children with disabilities are also less likely to initiate social interactions with their peers without disabilities and are less likely to respond to initiations made by their peers without disabilities.

The New Zealand research however shows contradictory results. These studies carried out during the 1980s found no major differences between the children with disabilities and their peers without disabilities in regard to their social interactions. It is important to keep in mind however that the children in these studies had Down Syndrome, while the children in the overseas studies had varying degrees of disability.

The results from the studies discussed indicate that various types of social relationships exist between children with and without disabilities. Some children with severe developmental disabilities enjoy secure meaningful social relationships with their peers, while other children do not. These results highlight the need to consider each child's social relationships as unique and not to make assumptions about these relationships before they have been examined. The results may also suggest that researchers frequently look for negative social interactions rather than positive interactions, because they themselves cannot see children with disabilities as being capable of sustaining meaningful relationships. This emphasises the need for



researchers to closely examine their own attitudes, assumptions and expectations about disability.

It would seem that the success of social relationships between children with severe developmental disabilities and their peers without disabilities depends on a number of different factors. These may include the school, community and classroom teachers' views and commitment to full integration and successful social relationships. Research also suggests that children's attitudes are also dependent on the attitudes of significant others, such as parents, teachers, and other adults. With this knowledge parents and teachers should first examine their own attitudes toward children with disabilities before they can expect an improvement in children's social interactions.

There are a number of studies which have focused on the behaviour of the child with the disability as being the major factor in the non-acceptance of these children. This may indeed be a factor in some cases but we have to decide where the responsibility for this inappropriate behaviour lies. If we want children with disabilities to be accepted, this responsibility must lie with these children's peers, teachers and the whole school community.

The research reviewed suggests that it may not be sufficient just to place a peer in contact with a child with a disability and expect inclusive attitudes, social acceptance and positive social interactions and social relationships to develop. Haring (1991) suggests that "social interaction skills and social relationships will not usually develop as a passive consequence of functional integration. Instead, active programming efforts ... are required to achieve the goals of integrated lifestyles for people with severe handicaps" (p. 196). The following section focuses on the interventions that have been developed and implemented to improve social interactions and relationships between children with and without disabilities.

### Intervention Research

Predictably, because of research that has described the problems associated and encountered in social relationships between children with and without disabilities, there have been attempts by researchers and educators to intervene and implement strategies and interventions designed to improve social interactions and social relationships. Presented below are interventions from both psychological and sociological perspectives. Different interventions focus on both formal and informal strategies to improve social relationships between children with and without disabilities.

Understandably, the path to improving the social relationships between children with disabilities and their regular classroom peers without disabilities is not a simple or straightforward one. Uditsky (1993) is one researcher who suggests we use more informal or naturalistic strategies to improve social relationships. He strongly criticises professional educationalists in the field of developmental disabilities who simply see friendship as a "service plan goal" (p. 89). He states that for a number of reasons "friendship strategies should be intensely scrutinised" (p. 90). He does however state that facilitation may be necessary. Uditsky discusses some of the normative pathways of childhood support that encourage opportunities to play and interact formally and informally. These, he states, are the pathways that adults need to support in such ways as making their home open and inviting to children, having toys that encourage interactions and are currently popular (p. 94). "Inclusive schooling provides another vehicle for normative pathways, especially when the educational methods used are ones which naturally support relationships. Schools that have peer support strategies in place for all children and where children learn in cooperative groupings are examples" (p. 94). Uditsky recommends that friendship for children with developmental disabilities "would be far better served if such natural methods were used to embed children with disabilities in the informal pathways that already work their ordinary wonders" (p. 94).

Meanwhile, Erwin (1993) encourages the use of more formal interventions for improving social relationships. He discusses three distinct groups of theories for improving children's peer relationships by improving their social skills. The first group of theories is concerned with the learning and modification of children's behaviour or social knowledge. This approach is seen as especially beneficial for teaching the basic skills required for social interaction. The second group of theories is concerned with teaching children new and more adaptive ways of thinking about people and social situations. This second approach assumes that overt behaviour is mediated by cognitive processes and that changing the pattern of these processes will lead to improvement in the child's social abilities. As can be noted, these two approaches assume that the problem is with the individual rather than society. The third group of theories is concerned with changing peer group structures that produce or maintain maladaptive patterns of behaviour. This approach recognises that social behaviour is meaningless outside of its social context (Erwin, 1993, pp. 224-225).

The following intervention literature has been put into three categories. These are contextual interventions, interventions designed to change the social interaction behaviour of the children with disabilities and interventions designed to change the social interaction behaviour of the children without disabilities.

### Contextual Interventions

Contextual interventions are those that are designed to change the setting, the opportunity for social interactions, and the ecology for social interactions. Included in contextual interventions are environmental interventions. Manipulating physical aspects of the environment has been found to be one of the most effective ways to encourage, elicit, and maintain social interaction. "This can include altering the materials or activities within the environment in terms of (a) the number and variety of materials, which can allow for greater choice; (b) student preference; (c) attractiveness; (d) interactiveness of activities and materials. Manipulations of seating arrangements and use of space in a classroom can also lead to substantial increases in social interaction" (Breen, 1992, p.101). Furthermore, Breen (1992) describes contextual interventions as "those variables that define multiple stimulus conditions that "surround" a social interaction and that are oftentimes not physically observable, but that can be systematically measured through more complex quantitative and qualitative measurement systems" (p. 96). These variables may include such things as manipulating the status and role of a child, classroom structure, group size, curriculum adaptations and programmes such as circles of friends, and Maps.

The influence of teacher-structured activities on children's social interactions was examined by DeKlyen and Odom (1989). The study involved twenty-eight preschoolers with mild or moderate disabilities and eight of their peers without disabilities. The authors observed the children during play to examine peer interactions between the children with and without disabilities, and interactions between the children with disabilities and their teacher. They found that the less competent children interacted less frequently with peers and more frequently with teachers. More peer interaction was observed in play activities that were more structured.

Chandler, Fowler, and Lubeck (1992) carried out a study which examined the effects of multiple setting events on the social behaviour of three preschool children with developmental delays. Three setting events were examined and included teacher presence and behaviour, toys and materials, and peer

group composition. By direct observation of behaviour both the number of initiations and peer-directed behaviour were recorded. Results showed that two of the children tended to interact more with their peers when the teacher was absent from the play area, when they played with a socially skilled peer, and when materials were limited. The third child had consistently low levels of peer interaction. The authors suggest however that setting events may not be sufficient to promote improvements in peer interaction for children who may not have the necessary skills or whose behaviour has been ignored or punished in the past.

### Circles of Friends

There is increasing evidence from qualitative studies that the development of interactions in naturally occurring settings may promote positive outcomes. There are a number of programmes both formal and informal which provide support for the child with disabilities in the regular classroom. One formal means is a programme called 'Circles of Friends' developed by Forest and Lusthaus in the 1980s. This process begins with a group discussion with the peers or classmates of the child with a disability, who is absent from this initial discussion. This discussion is led by an adult in the role of a facilitator. A discussion about the importance of friendships will then develop, an emphasis can be placed on affirming the children's capacity to give these gifts to one another and to the student with special needs. They need to recognise that friendship grows with time and usually begins with shared activities. Not everyone will be friends with the child with a disability, but they can all be friendly (O'Brien, Forest, Snow & Hasbury, 1989). The facilitator asks for volunteers to meet regularly with the child with disabilities to share his or her successes and challenges and to make commitments to activities that will include and support him or her.

### Maps

"MAPS is a collaborative action planning process that brings together the key actors in a child's life. In the spirit of co-operation, this team creates a plan of action to be implemented in a regular classroom setting" (Forest & Pearpoint, 1992, p. 29). Involved in this process are classroom peers, teacher, teacher aides, family members, a facilitator, and a co-facilitator. Peers are very important in this process, so it is essential that the planning and meetings should not take place until the child with disabilities is a member of regular education (National Training Resource Centre Flyer, 1990).

### Curriculum Adaptations

Adaptations to the classroom curriculum can positively influence social relationships between children with and without disabilities. This can be achieved by integrating friendship into the core curriculum. Teachers and schools can intentionally build friendship into the curriculum. This means that children are more likely to understand the relationship between friendship, respecting others, and treating others with dignity. Teachers and schools can also develop an anti-bias curriculum. This means the curriculum should not be biased against or include stereotyping of any individual or group. This curriculum is based on the value that differences are good and we should teach children to appreciate differences among people (Falvey & Rosenberg, 1995, p. 273-274).

### Status of Participants

By altering the status of a child with a disability, children without disabilities may increase their interactions toward the child. Researchers have found that by altering "how someone is perceived, in terms of his or her abilities, ties to peers, associated reinforcing behaviours, or power it is possible to significantly affect the degree of acceptance and resulting levels of interaction" (Breen, 1992, p. 96).

An example of this type of intervention can be seen in a study by Sainato, Maheady, and Shook (1986). They carried out research which examined the effects of placing a socially withdrawn child in a classroom leadership role on positive peer interactions and sociometric ratings. Three preschool children (aged 4 years) who were described as socially withdrawn based on observations, teacher rankings, and peer sociometric scales took part in the study. During the intervention phase the teacher stated to the class that one of the target children was to be a classroom helper. The child was then given a 'manager' button and was placed in charge of a range of highly preferred activities. During the intervention phase there were increases in positive social interactions during free-play periods, both interactions initiated by the target child and those directed toward the child by peers. Negative social interactions were also reduced. The authors suggest this type of intervention may also be effective with children of differing ages. They also suggest it would be worthwhile to ascertain whether this type of intervention would be effective with children with social skill and performance deficits.

### Participant Role

There is some suggestion that bringing together children with and without disabilities in formal and informal programmes can result in changes in social interactions and relationships. Two programmes which target social skills have emerged which rely on children without disabilities in relationships with peers with disabilities. The first is peer-tutoring when the peer without the disability changes social behaviour through systematic teaching procedures. The second programme involves 'buddies', or 'friends' who change social behaviour through incidental modelling, prompting, and feedback within the context of a supported friendship (Breen, 1992, p. 97).

An example of peer-tutoring is a programme called the 'Peer Education Program' (PEP) currently in use in a number of schools in the United States. This programme involves fourth, fifth, and sixth grade children without disabilities sharing activities with their peers with severe disabilities. Students without disabilities are selected as student leaders in the same way as they would be selected for paid employment. They are then assigned a partner with whom they work in reading, maths, art, physical education, and computer skills for 30-minute sessions 3 to 5 days a week for six weeks. The student leaders also participate in weekly training conferences with the supervising teacher. Prior to commencing tutoring the student leaders fill out a pre-PEP survey and at the completion of the programme complete a post-PEP survey, and are interviewed. The students with a disability are also observed. Parents and teachers are surveyed. All the participants, whether or not they had a disability benefited both academically and socially from the programme. The children with disabilities began to initiate peer interactions more frequently, and showed improvement in academic skills. There was also significant growth in positive attitudes towards the students with disabilities (Fulton, LeRoy, Pinckney, & Weekley, 1994, pp. 6-11).

Kamps, Barbetta, Leonard and Delquadri (1994) carried out a study which examined the effects of peer tutoring on peer interactions, as well as on reading skills for three children with autism. The research design and conditions consisted of a baseline phase (traditional instruction), a classwide peer tutoring phase (reading with a peer), and unstructured free-time groups. The results showed an increase in mean lengths of interactions for each of the three children during the classwide peer tutoring phase.

### Classroom Structure

Classroom structure appears to have a significant impact on social interactions between children with and without disabilities. Rather than traditional academic classroom structures, the use of cooperative groups appears to reduce the likelihood of negative comments and rejection (Breen, 1992, p. 99).

Johnson and Johnson (1980, 1981, 1986, 1989) are perhaps the most famous proponents of cooperative learning strategies, and have written extensively. One study carried out in 1981 examined the effects of cooperative learning compared to individualised instruction on building friendships between children with and without disabilities. In the cooperative learning group the students were instructed to work together as a group, with the teacher praising and rewarding the group as a whole. In the individualised condition the students were instructed to work on their own, and were praised and rewarded individually. Results found that there was far more interaction between students with and without disabilities in the cooperative than in the individualised condition. Students without disabilities addressed four times as many comments to their peers with disabilities in the cooperative than in the individualised condition. Ninety four percent of the comments were positive or neutral.

New Zealand research has produced some pleasing results using cooperative learning strategies. Townsend, Boyd, and Wilton presented a paper at the 9th World Congress, International Association for the Scientific Study of Mental Deficiency in 1992. Three projects conducted through the University of Auckland were examined for the effectiveness of cooperative learning techniques in enhancing the social acceptance of children with intellectual disabilities by their regular class peers.

Project One examined strategies to promote the social acceptance of children with disabilities in kindergartens. Children with disabilities from six kindergartens took part in the study. The children in two kindergartens participated in a social skills training programme, another two kindergartens were involved in a social skills plus cooperative learning programme, and the final two kindergartens had no special programme. The social acceptance of the children with disabilities by the children without disabilities increased most in the social skills and cooperative learning programme.

Project Two examined cooperative learning with children who have a mild disability. The children involved were aged nine to thirteen years who were mainstreamed in regular classes. One mainstreamed child in each of ten classrooms was assigned to a six week (24 sessions) cooperative learning group with regular children in their classrooms. Students took responsibility for mastering part of a social studies exercise, and then teaching this part to the other group members. Group achievement was then rewarded. The social acceptance of the children with disabilities by their class peers was improved by this cooperative learning exercise. However, observations of interpersonal behaviour, perception of class environment, self-esteem, and teacher ratings of adjustment showed no change.

Project Three examined the use of cooperative learning involving children aged six to seven years who were in a special class and were moderately disabled and regular class children. The programme required regular class children in junior classes to visit the special class twice a week for thirty minutes, over ten weeks. Fifteen children without disabilities participated with the children with disabilities in cooperative learning activities involving dramatic play. On two other days, fifteen other children without disabilities engaged in social contact with the children with disabilities. Another group of fifteen children without disabilities had no contact with the children with disabilities. The children without disabilities showed greater social acceptance (in terms of measures of social acceptance, sociometric nominations, and social distance) of the children with disabilities in the special class after having participated in a cooperative learning programme. These results were supported by observations of more social interactions and cooperative play in the classroom and in the playground between children without disabilities and those with disabilities.

The quantitative effects of using cooperative learning groups compared with traditional instruction on academic and social learning were studied by Dugan, Kamps, Leonard, Watkins, Rheinberger and Stackhaus (1994). Two children aged nine and ten years with autism and their regular classroom peers participated in this study. The experimental design and procedure comprised of a two week baseline (traditional instruction), cooperative learning groups for three weeks, a return to traditional instruction for two weeks, and then finally a return to cooperative learning groups. Data on frequency, length of interactions, and total duration of peer interactions was recorded. A dramatic increase in the total duration of peer interactions for the two students with disabilities occurred.



Schleien, Mustonen, & Ryders (1995) examined the effects on social interactions of participating in cooperative groups in an inclusive art programme with age-appropriate peers without disabilities. Two age groups (4-8 years and 7-11 years) of students with autism and moderate to profound intellectual disabilities participated in the study. There were increases in positive initiations by both groups of children without disabilities towards their peers with disabilities following the intervention. However, for the older group of children this increase declined over a short period of time and returned to baseline levels. In both age groups there was no increase in the number of initiations by the child with a disability towards their peers without disabilities.

#### Group Size

A further contextual variable is influencing the responding of students through group size. This strategy uses a group of peers rather than a single peer to facilitate social inclusion into peer networks (Breen, 1992, p. 100).

Haring and Breen (1992) examined the use of a peer-mediated social network intervention to enhance the social integration of persons with moderate and severe disabilities. This intervention involved recruiting groups of same-aged students without disabilities to participate in weekly discussions with an adult integration facilitator to increase opportunities for social interaction for two students with moderate to severe developmental disabilities (both aged 13). The groups met to discuss social interactions that had occurred with the students with disabilities and to talk about strategies to promote greater inclusion of the students into ongoing social interaction. The students without disabilities participated in the design and implementation of social skills interventions during transition periods and lunch. The students without disabilities used self-monitoring data sheets to record the quantity and quality of social interactions. The frequency of interactions, number of opportunities for interaction, and appropriateness of social interactions were analysed. This intervention was successful in increasing both the quantity and quality of interactions and promoted the development of friendships.

### Interventions Designed to Change the Social Interaction Behaviour of the Child with Disabilities

A second set of interventions are designed to change the social interaction behaviour of the child with a disability. These interventions have been grouped under three headings, adult mediated instruction, student-initiation strategies and self-management. Generally these interventions teach the child with a disability new social interaction skills (how to initiate, how to maintain interactions and how to respond to initiations).

#### Adult-Mediated Instruction

According to Breen (1992) this strategy involves the training of specific interaction skills (including prompting, modelling, social script training, shaping, time-delay, correcting, and reinforcing) which is conducted by a teacher or other adult. Adult mediations have been used effectively to teach specific social behaviours. However, they have also been criticised for their cost in terms of teacher time, their lack of maintenance over time in the absence of teacher reinforcement, their failure to generalise to more natural contexts in the presence of same-age peers and their disruptiveness to the ongoing social interaction (Breen, 1992, pp. 90-92).

Chandler, Lubeck, and Fowler (1992) examined 51 studies which were published between 1976 and 1990 and which investigated peer interactions (social behaviour directed toward a peer). This literature review looked at the effectiveness of the studies' interventions for generalisation and maintenance of pre-school children's social skills. In the studies reviewed, a number of behaviour change strategies were employed. These included positive reinforcement (67%), instructions (65%), prompting (57%), rehearsal (46%), modelling (41%), feedback (35%), and discussion (35%). Many of the interventions also combined a number of the strategies into a treatment package. All of the interventions were successful in producing behaviour change. The target behaviours were initiation to peers, conversation, reciprocal interaction, responding to peers, and sharing with peers. The two most common strategies combined by the successful group were prompting plus reinforcement (57%) and reinforcement plus feedback (50%). The most common combination of three strategies in the successful group was prompting, positive reinforcement, and feedback (43%). Studies able to produce generalisation appeared to use a combination of antecedent and consequence strategies (prompting and positive reinforcement). There was only a small difference between the successful and unsuccessful groups in

relation to length of treatment sessions and the number of treatment sessions employed.

### *Social Script Training*

Social script training is a strategy that has been used in an attempt to increase social interactions between students with and without disabilities. Goldstein and Cisar (1992) investigated the effects on social interaction of teaching scripts to preschoolers with and without disabilities. The three children with disabilities in the study were described as having autistic characteristics. Script training was conducted for five to ten days following baseline, and consisted of three scripted activities (pet shop, carnival, and magic show). After the conclusion of script training the children were observed for five minutes during play periods. The teacher had the option of praising or prompting. Results obtained showed improvements in both verbal and nonverbal theme-related behaviour and an increase in general social interaction. Before the intervention, the children without disabilities averaged 10.6 social behaviours per session, compared to an average of 5.3 for the three children with disabilities. After intervention an average of 18.2 social behaviours per session were recorded for the three children with disabilities, and 22.1 for the children without disabilities.

Krantz and McClannahan (1993) investigated the effects of a written script and a script-fading procedure on the social initiations of four children with autism. These children were taught ten scripted sentences and questions and were prompted to use them, then these prompts were faded over a two-month period. During baseline sessions which were ten minutes in duration, two of the four children did not initiate, but during the script condition their mean initiations were 15 and 13. The third child's number of initiations were 0.1 at baseline, increasing to 17 during the script condition. The fourth child's initiations were two during baseline and 14 during the script condition. As a consequence of the training unscripted initiations also increased. According to the authors this is a very beneficial procedure as it enables children with severe developmental disabilities to practise context-specific, peer-directed generative language that is not prompted by adults or peer confederates.

### *Student-Initiation Strategies*

Jolly, Test, and Spooner (1993) discuss the advantages of teaching children with disabilities to become the 'initiator' rather than the recipient of social interactions. First, being an initiator allows the child more control over the

interactions, thus increasing the probability of success. Secondly, when they initiate interactions, children with disabilities experience increased independence. Thirdly, when children with disabilities initiate interactions, they experience greater frequencies of interactions (p. 46).

Haring and Lovinger (1989) taught play initiation behaviours to a child with severe developmental disabilities and rewarded children without disabilities when they initiated towards him. The procedures included an awareness session for the children without disabilities. This involved a discussion about autism, the teacher showing the children slides of both themselves and their peers with disabilities, and providing an opportunity for the children to ask questions. The children were then shown a reinforcement system (stickers), and told that if they initiated towards their peers with disabilities they might get a sticker. The results showed that the awareness training alone increased the peers number of initiations, but did not improve the way they responded to the initiations of their peers with disabilities. Following play training, the number of initiations by the children with disabilities increased, as did the initiations and responses of the peers.

Jolly, Test, and Spooner (1993) investigated the use of badges to increase initiations of children with severe disabilities in a play setting. The participants in this study were two boys aged ten and twelve years, both were nonverbal and had severe disabilities. Three children without disabilities also participated in the study. Initially the two boys were taught to use badges with photographs to indicate to others the activity they wanted to play. Baseline measures of initiations and sharing were recorded by direct observation. During the next phase, badges with photographs were introduced to the free-play area. When the peers arrived, they were told that they had fifteen minutes of free time and that their friends had a new way of telling them what they wanted to do. During baseline it was found that neither of the two boys initiated or shared. After the intervention, one of the boys initiated a range of zero to seven per session. The second boy had increases in initiations only after teacher prompting occurred. He had a range of zero to three initiations per session. Although there was an increase in sharing for both boys, the number of sharings was maintained only by the second boy. The authors also reported that this intervention was not successful at getting students to sustain interactions once initiated.

### *Self-management Techniques*

Self-management techniques have also been used to teach children with disabilities to initiate social interactions toward their peers without disabilities. Self-management involves teaching the child to determine whether or not the desired behaviour has occurred, how to record the occurrence of the behaviour, and how to obtain reinforcement. Self-management strategies that have been taught successfully include (a) self-monitoring, (b) self-evaluation, (c) self-reinforcement, and (d) presenting verbal and nonverbal self-prompts (Williams, Howard, Williams & McLaughlin, 1994, p. 23). This technique has a number of advantages over other social skills training techniques. First, it overcomes the problem of intrusiveness or stigmatisation which may occur when a clinician or other adult is present. Secondly, it allows for more opportunities for natural social exchanges (Koegel, Koegel, Hurley & Frea, 1992, p. 342).

### Interventions Designed to Change the Social Interaction Behaviour of Children without Disabilities

A third set of interventions are designed to change the social interaction behaviour of the children *without* disabilities. These interventions have been grouped under four headings - disability awareness, peer mediated instruction, peer initiation strategies and adult and peer mediated instruction. Generally these interventions teach children without disabilities new social interaction skills related specifically to a child with a disability (how to initiate, how to maintain interactions and how to respond to initiations).

#### Disability Awareness

Disability awareness appears to be a prerequisite to successful integration and inclusion. It is important that all the people involved in the education of a child with a disability are provided with information about disabilities. This means *everyone* at the school including the principal, teachers, teacher aides, and other children at the school.

Keller and Honig (1993) carried out a study that aimed to promote positive interactions between children with and without disabilities. The authors implemented three thirty-minute weekly sessions that were designed to increase children's awareness of disabilities. At the conclusion of the training a child with multiple disabilities was introduced into the class. The results showed that the intervention had a positive effect on the number of social interactions initiated towards the new pupil.

### Peer-Mediated Instruction

This strategy involves teaching peers to initiate toward, respond to, prompt, and/or reinforce their peer with disabilities (Breen, 1992, p. 92). Within this strategy, "the role of the peer generally takes three forms. The peer can be used as a facilitator who directly prompts and reinforces social responding in the peer with disabilities, the peer can act as the initiator of the social interaction in 'peer-initiation strategies', or the peer can be used as a confederate within a training context as a respondent to the initiations of the peer with disabilities, in 'student-initiation strategies'" (Breen, 1992, pp. 92-93). Peer-mediated instruction has, however, not escaped criticism. One criticism is that the child with the disability may become dependent on the peer without a disability. A second criticism is that the effects are generally not maintained after teacher prompting and reinforcement is removed (Breen, 1992, pp. 92-93).

Ostrosky and Kaiser (1995) investigated the effects of a peer-mediated intervention on the social communicative interactions between three children with moderate and severe developmental disabilities and their peers without disabilities. These children were aged nine years and one month, nine years and two months, and seven years and seven months. Also included in the study were six same-age peers without disabilities. The six children without disabilities were taught five social communication facilitation strategies to use during interactions with their peers with disabilities (mirroring, assistance, choice-making, descriptive talk, and responding). Data were collected on a number of behaviours. The peers without disabilities increased their use of the five strategies, which resulted in an overall increase in the frequency of verbal behaviour. Results also showed that approximately 80% of the communicative attempts of the children with disabilities were responded to by the peers without disabilities. Also significant was the increase in the frequency of communication utterances by the children with disabilities and an increase in the time that these children spent engaged in social interaction.

There has been a dearth of research in the area of facilitating interactions in the school playground (Donder and Nietupski, 1981). One purpose of their study was to examine whether the use of peers without disabilities could facilitate interactions with all students. All students at this school took part in a session on disability, and were then asked if they would like to experience working with three adolescent boys with intellectual disabilities

who attended their school. The volunteers chosen then attended two training sessions that focused on answering questions and teaching the children playground activity skills which they would teach to the three boys with disabilities. A teacher observed the children for five days and gave feedback to the students without disabilities. The students without disabilities also attended weekly meetings after school to get answers to questions. During baseline, interactions between students with and without disabilities was very low (0%, 11%, 4%) but following the training these interaction rates increased substantially (88%, 97%, 72%). These rates however declined during follow-up (60%, 80%, 30%), but were still a lot higher than during baseline.

### Peer-Initiation Strategies

The rationale behind the peer-initiation strategy is that (a) peers are the natural discriminative stimuli for positive social interaction for children with disabilities, (b) peers may be more effective than teachers in promoting generalisation and maintenance because they are participants in natural settings, and (c) teacher attention or praise if used to reinforce the social interaction may disrupt ongoing peer interactions (Odom, Chandler, Ostrosky, McConnell, and Reaney, 1992, p. 307).

Goldstein, Kaczmarek, Pennington and Shafer (1992) investigated the effects of a peer-mediated intervention on social interactions between five preschoolers with autism and ten of their typical peers. The children without disabilities were trained to attend to, comment on, and acknowledge the behaviour of their peers with disabilities. Specifically, they were taught to (a) establish the peer's attention, (b) say the peer's name, (c) talk about ongoing activities, and (d) talk again. They received both verbal and token reinforcements. During baseline, the frequency of interactions between the children with disabilities and the target children was quite low. In the five minute play sessions, typically no more than an average of five social behaviours were directed towards a target child. During peer intervention the frequency of peer interaction increased to an average of 20.5 to 26.5 per session. However the rate of teacher or adult prompting remained quite high throughout the intervention phase (10 to 15 per session).

Christopher, Hansen, and MacMillan (1991) investigated the effectiveness of a peer-helper intervention to increase three children's social interactions. Child one was an eight year old boy, child two and child three were both seven year old boys. All three were described as socially isolated. Two

children from each of the boys' classes were selected by the teachers to be peer helpers. The peer helpers were taught the following skills: (a) how to initiate interactions with the child with a disability, (b) preparation for the initiation to be ignored or refused by the child with a disability, (c) maintaining the interaction, (d) ideas for structuring play activities, and (e) handling negative behaviours from the target child. The peer helpers were then instructed to play with a child with a disability during play-time. Assessment consisted of direct observation, sociometric ratings, role-play assessment, and teacher and self-report. The numbers of positive interactions for each child increased substantially with the intervention and were always higher than during the baseline phase. However, the effectiveness of this intervention on decreasing negative interactions is not clear. Although they do not have data on it, the authors suggest that the duration of the interactions increased. This is because positive social interactions increased but initiations did not. The impact of the intervention on sociometric ratings by peers and teacher ratings is unclear because of variable results across children.

Odom, Chandler, Ostrosky, McConnell, and Reaney (1992) examined the effects of fading teacher prompts from peer-initiation interventions for six preschool children with disabilities. Children without disabilities were taught five specific initiations for promoting social interactions (share, share request, play organiser, assistance, and persistence). The children were put in groups consisting of a child with a disability, and one or two peers. The teacher then introduced an activity and prompted the peer to initiate social interactions approximately every thirty seconds. Peer initiations and social interactions increased substantially with the introduction of peer training and teacher prompts. Verbal prompts by the teacher continued while visual feedback was introduced in order to allow peers the opportunity to monitor their levels of social interaction as the teacher faded her verbal prompts. Gradually the teacher prompts were reduced in frequency and became more general. The visual feedback was also gradually faded. Results found that even after teacher prompts and visual feedback were faded, peer initiations and social interactions remained at the same level for most of the children.

#### Adult and Peer-Mediated Instruction

This strategy attempts to improve the social interactions between children with disabilities and their peers without disabilities by bringing together direct instructional strategies using adults and peers to intervene more extensively in the social interactions (Breen, 1992, p. 94).



Kamps, Leonard, Vernon, Dugan, Delquadri, Gershon, Wade, and Folk (1992) investigated the use of social skills groups for three boys with autism (all aged seven years), to improve social interaction with peers without disabilities. Observations were conducted during play group sessions to determine the frequency of, time engaged in, and duration of social interactions between the students with and without disabilities. During the social skills training phase all the children were put into groups comprising both children with and without disabilities. They were taught a number of specific skills that included, (a) initiating an interaction, responding to initiations, and keeping an interaction going, (b) conversations, greetings, and topics, (c) giving and accepting compliments, (d) taking turns and sharing, (e) helping others and asking for help, and (f) including others in activities. Following this training there was a feedback condition. Results showed that the frequency of, time engaged in, and duration of social interactions increased as a result of the social skills training.

Roeyers (1995) aimed to increase peer-directed behaviour using a peer-mediated intervention. The researchers were hoping for increases in (a) time spent on behaviours necessary for social interaction, (b) time spent in peer-interaction, (c) responsiveness, (d) the frequency of initiation behaviour, and (e) longer uninterrupted interactions (p. 162). Generally there was an increase in interactions, and a shift from negative to more positive interactions. However, there were no improvements or increases in the social initiations of the children with disabilities.

### Summary

These studies that used interventions aimed at improving or increasing social interactions between children with and without disabilities show promising results. One criticism however, is that the majority of the research was carried out over a short period of time and with limited observations of the participants involved. It is important to observe the child over an extended period of time to determine which interventions are most appropriate for the individual child, for that particular setting and for that particular classroom teacher.

When implementing interventions in schools, it is also important to consider the teacher's perspectives on possible interventions. A study undertaken by Hamre-Nietupski, Hendrickson, Nietupski and Shokoohi-Yekta (1994) is very important as it provides us with information on teachers perceptions of facilitating friendships between children with severe

developmental disabilities and their peers without disabilities. The teachers surveyed strongly agreed that friendships were possible and that they can and should be facilitated by adults. One of the survey questions examined strategies that the teachers would personally be willing to carry out to facilitate these friendships. First equal for the highest ranking strategies were cooperative learning approaches which emphasise children learning together, and collaboration with special education teachers. The third ranked strategy was teaching social interaction skills to both students with and students without disabilities. The fourth ranked strategy was teaching students without disabilities to be peer tutors and/or partners. The fifth ranked strategy was to modify curriculum and/or instructional strategies to promote friendship building. The teachers were less willing to arrange integrated in-school and after-school activities, or organise a 'circle of friends' around the student with disabilities to promote interaction and support. This lends evidence to a comment by Meyer (1996) that interventions such as 'circle of friends' have been designed for what she termed 'super teachers' and that the majority of teachers are not willing to implement them.

A further consideration is the nature and types of relationships rather than just the number of social interactions. It is imperative that the qualitative nature and type of social interactions are examined. The frequency, duration and turn-taking in social interactions may provide valuable information, but by themselves are limited. Designing and implementing interventions based only on this information may result in a greater number of interactions which may be longer and more complex interactions, but they may still be of an undesirable, negative nature.

### The Present Study - Case Study One

#### Summary

Research has shown that generally children with severe developmental disabilities may experience some difficulties in their social interactions and social relationships with children without disabilities. It has provided us with a range of findings on the nature, frequency, duration, and types of social interactions between children with severe developmental disabilities and their regular classroom peers without disabilities. However research on children's social relationships does offer us a variety of interventions designed to facilitate an improvement in social relationships between these children.

### Aim and Purpose

The purpose of the first case study was to explore the social interactions and social relationships between Max a six-year old boy who has a severe developmental disability and his regular school peers. A second purpose was to attempt to improve these social interactions and relationships by implementing an appropriate intervention. The present research will extend the New Zealand data base in the area of social relationships for children with severe developmental disabilities. Currently, this area is very limited as the literature review showed. The present research will employ both behavioural and descriptive methods to both gather and analyse data to answer the following questions.

### Research Questions

Specifically, the following questions were addressed;

- What was the nature, number, and duration of social interactions between Max and his school peers?
- What types of social interactions were observed between Max and his peers?
- What were the effects of implementing an intervention drawn from the literature that was designed to increase or improve positive interactions between Max and his school peers?

### Gaining Entry

Once approval for my proposed study was obtained from both the University of Canterbury Human Subjects Committee (see Appendix A) and the Education Department Research Supervision and Ethics Committee (see Appendix B), I gained access to participants by sending out consent forms and information sheets to a programme for children with severe motor disorders (see Appendix C and D). These forms were then distributed to parents who had a child with a severe disability who was attending a regular school. Four consent forms were returned to me so I met the parents and discussed the study. I then approached the principals and the classroom teachers of the four schools for their agreement to participate in the study. This was received from three of the four schools, therefore this research is presented as three case studies.

### CHAPTER THREE

#### Case Study One

Max was aged six years and nine months at the start of the study in October 1995. He has Spastic Quadriplegia Cerebral Palsy, good hearing and eyesight and does not take any medication. Max spends his time in a wheelchair. Max has got a 'big mac' that can have messages taped on it for up to twenty seconds. He uses it for saying 'good morning', and for telling news. Max is small for his age compared to the children in his class. He has short brown hair and he wears the standard shorts and t-shirts during summer, and trousers and sweatshirts during the winter. He likes to wear 'Thomas the Tank Engine' clothing and caps.

Max attended a state primary school outside his neighbourhood as he was refused placement at his local school. The roll of this school fluctuates between two hundred and fifty and three hundred children from year one through to year six and is located in a working class neighbourhood in a major city in New Zealand. The school has facilities for the toileting and showering of children with disabilities. Max started school part-time at the end of February 1995, aged six years and two months. He attended school on Mondays, Tuesdays and Thursdays 9am-2pm. Max also attended a specialised programme for children with motor disorders twice weekly, after school on a Thursday, and all day on Fridays. He also went to speech and language therapy weekly. There are six children in the school with teacher aides but Max is the first child with severe multiple disabilities to be mainstreamed in the school. His female classroom teacher was on a one year contract at the school and has a number of years teaching experience. She said she had not had much experience teaching children with severe disabilities.

Max's peers were also involved in the study. They included his classmates and other children at the school who were in the playground when observations were conducted. During the 1995 school year, Max was in the new entrants' class with children whose ages ranged from five years to five and a half years. He was the oldest child in the class. There were sixteen children (twelve boys and four girls) in this class at the start of the study but this increased considerably as the year progressed.

During 1996, Max was in a year two class with nineteen children (twelve boys and seven girls) who were approximately six years of age. Max attended school on a Tuesday and Thursday from 9am until 3pm, on a Monday and Wednesday from 9am until 2pm and on a Friday from 9am until 11am. He attended a specialised programme for children with motor disorders after school on a Monday and Wednesday and from lunchtime on a Friday. His female classroom teacher who had been teaching at the school for over twenty years said she had limited experience working with children with severe disabilities. Although the learning in the class was primarily teacher directed, the children worked on activities together and were encouraged to interact and communicate with each other. Approximately half of these children were in Max's class during 1995. He had a full-time female teacher aide.

I had an informal interview with Max's 1995 classroom teacher and discussed her views on Max's social relationships. She stated that she viewed his social relationships:

quite positively, the only difficulty is when a new child comes into the class, and they may imitate Max's noises and behaviour. The other children always want to be his partner. It is difficult because the other children are not in the class for the whole year. They get moved on, but Max always stays in this class, and will for the rest of the year. This does mean however that when Max moves on he will know most of the children. It is hard for the other children as Max has no verbal language, but there are many smiles. Max does not have any special friends.

I also had an informal interview with Max's mother and discussed her views on Max's friendships. She said:

Max was enrolled in a kindergarten which he attended for three years. He had many friends at kindergarten, both boys and girls. He has had children from kindergarten and school around home and really enjoyed it but it is hard to find the time to visit the friends he made at kindergarten, as they all live quite a distance away. For the last two years, Max has been involved in the CCS holiday programmes. Max also goes to Keas, where he has a male friend, he does not see him as much now. I wonder if it is an age thing with children wanting to spend less time with Max as they get older. The children at school are

not allowed to run with the wheelchair, which Max loves. I think that they may get bored, which may be a reason for them not wanting to spend much time with him, especially as they get older. I am concerned that because Max is in a new entrants' class, the children get moved on about every six weeks, and this does not give Max the opportunity to form close relationships. Our family's philosophy and aims are to teach Max to feel good about himself, to feel positive about himself and to be independent. We want him to know that even though there are things that he cannot do, there are also things that he can do.

## **Method**

### **Quantitative Method**

Experimental research methods have been used extensively to study children's social interactions. The method of applied behaviour analysis relies on frequent measurement through direct observations of peer interactions. The data is analysed to determine the relationships between a child's behaviour and factors in the environment that may affect it (Strain, McConnell, Carta, Fowler, Neisworth, & Wolery, 1992, p.129). The resulting experimental intervention is a manipulation of the identified factors.

### **Settings**

*Classroom.* Observations were conducted in Max's regular classroom. The classroom contained assigned desks for all the children to sit at and a mat for all the children to sit on. The classroom had nominated areas that housed various activities (i.e., book corner, block's corner, painting corner). The classroom had the children's work displayed on the walls. Max's desk was at the back of the classroom.

*Playground.* Observations were also conducted in the playground at Max's school. The school playground had both concrete and grassed areas for recreation activities such as ball games and general playing (i.e., roller skating and skate boarding). The school also had equipment that the children could play on (i.e., slides, jungle gyms, climbing frames, tyre swings).

*Other.* Observations were also conducted at the school swimming pool and the school library. Max's class visited the library weekly and it was also open during lunchtime.

## Design

*Baseline and Functional Analysis.* During the baseline phase, I observed Max in his regular classroom and in the playground. The observations took place for approximately an hour a day, for several days a week, over a six week period. This produced a total of eleven observations. From the baseline data a functional analysis was carried out and hypotheses were generated which were later used to determine and develop possible interventions for Max (see Appendix E).

*Development of the Intervention.* Haring (1991) states that research "designed to shape social relationships should include more fine-grained analyses of peer social interaction patterns prior to the design of the interventions" (p. 210). An intervention for the first ranked hypothesis was then developed and adapted from the literature for Max and his specific classroom context (see Appendix F). The hypothesis was: Max has a low rate of turn-taking because the initiating child does not realise that Max has responded, so is not positively reinforced. Therefore the interaction is not likely to continue.

*Pre-Intervention Conference.* After the baseline observations and the functional analysis were completed, I scheduled individual meetings with both Max's parents and his classroom teacher. The purposes of these meetings were to discuss the findings from the observations, then to discuss possible interventions and how they could be implemented. Permission was obtained from Max's parents and the classroom teacher before interventions could take place.

*Implementation of the Intervention.* A peer-training intervention was introduced and simultaneously evaluated by way of observations (see Appendix G). The observations continued as recorded in the baseline phase. They were conducted over a two week period, and produced a total of eight observations.

*Follow-Up.* Observations were conducted as during baseline during early 1996. They were conducted over a four week period, and produced a total of six observations.

## Direct Observation and Measurement

Before the commencement of the study the recording procedures were trialled and revised (see Appendix H for the social interaction recording form). A continuous running record of social interactions between Max and his peers was taken. Data were collected in the classroom and on the playground during lunchtime. Data collection was scheduled for when children had the opportunity to interact with each other. Interactions with

adults were not coded. This record included for each interaction: (a) characteristics of peers initiating the interaction (classmate versus non classmate; peer with a disability versus peer without a disability; and gender of the peer); (b) how the child responded to the initiation; (c) a record of the turn-taking of the interaction; (d) the content of the interaction; (e) the time of day of the interaction; and (f) the duration of the interaction. I started the stop watch when there was an initiation and stopped it when the social interaction concluded. I also recorded comments and discussions with the classroom teacher, the teacher aide, the school principal and children if they were discussing the child with a disability.

*Initiations.* Initiations were defined as motor (e.g., sharing, assisting, touching) or vocal behaviour by Max to another child or by any other child to Max. The behaviour had to be clearly directed to a peer (Kamps, Leonard, Vernon, Dugan, Delquadri, Gershon, Wade and Folk, 1992, p.282). If an initiation succeeded in producing successive initiations and responses, only the original initiation was counted. If an initiation was teacher or teacher aide directed it was recorded as an initiation by the child, but it was also noted that it was adult mediated.

*Responses.* Responses were defined as motor or vocal behaviour that acknowledged a reply to an initiation or to a preceding response. Non-response to an initiation was recorded when (a) an initiation was repeated, (b) the peer moved away, (c) the peer initiated to someone else, (d) Max moved away, or (e) Max initiated to someone else. Turn-taking in responses was recorded by using the participant's initial or a pseudonym.

*Social Interaction.* A social interaction was defined as beginning with an initiation and including a minimum of one response. An interaction was concluded when (a) thirty seconds or more had elapsed in verbal or nonverbal behaviour between the child with a disability and the peer, (b) one of the participants left, or (c) one of the participants directed verbal or nonverbal behaviour to another child.

## Procedures

*Baseline.* No intentional intervention or change in normal routine was made. Observations were conducted in the settings as described.

*Peer Training.* An intervention was developed to teach the children in Max's class to recognise Max's communication behaviours and to respond to them, to teach them about disability (disability awareness), and to encourage them to interact with Max in more appropriate and positive ways.



*Follow-Up.* Observations were conducted as during baseline. These observations were conducted at the beginning of the following school year, 1996.

## Results

### Number of Observations

Over the three phases (baseline, training, follow-up), twenty-five visits were made to Max's classroom and the school playground over a period of five months. In total 1445 minutes ( $x=58$  minutes) were spent observing (see Appendix J). All observations were conducted at the convenience of the classroom teacher, the child's parents, the teacher aide, and the researcher.

### Reliability of Measurement

Reliability was conducted by a second observer recording the same behaviours independently but simultaneously. Interobserver reliability was collected during one session during baseline and one session during the intervention phase. Reliability was calculated by comparing the totals of each observer for each variable using the formulae:

$$\frac{\text{smaller total}}{\text{larger total}} \times 100 = \% \text{ agreement (Cooper, Heron \& Heward, 1987, p. 94).}$$

$$\frac{\text{shorter duration}}{\text{longer duration}} \times 100 = \% \text{ agreement (Cooper, Heron \& Heward, 1987, p. 95).}$$

**Table 1. Reliability**

Number of Initiations by Max	X = 75% (range 50% - 100%)
Number of Peer Initiations	X = 87.5% (range 75% - 100%)
Duration of Interactions	X = 89.5 % (range 80% - 99%)
Number of Reciprocated Interactions	X = 90% (range 80% - 100%)
Number of Turn-Takes	X = 100%

### Changes in the Classroom Contexts During the Study

The classroom contexts changed over the course of the study. For example, observations occurred in the classroom, the library and at the school swimming pool. In addition, follow-up for Max was conducted the following year, which meant a new teacher and new classroom peers.

### Data Analysis

Running records were analysed to determine the nature of the interactive behaviours of Max and his peers. Running records were also analysed to determine the nature and type of interactions, the duration of interactions, the turn-taking of interactions, the number of reciprocated interactions, the number of initiations, and the number of responses.

The data were analysed under the headings: initiations, responses, turn-taking, and duration of interactions. Three to five hypotheses were generated under each heading. Sixteen hypotheses were generated in total. I then ranked these hypotheses according to how important I felt they were about social interactions and possible interventions (see Appendix E). The data showed that Max's responses were often just a look or a smile, and the children may not have recognised these responses, or they may not have realised these responses were invitations to continue the interaction. A large number of the observed interactions appeared to fit into this category. It was therefore decided to devise an intervention based upon this information.

### Nature of Interactions

The first research question addressed in this case study was: what was the nature, number, and duration of Max's social interactions with his peers?

### Interaction Style - Behaviours

The nature of the interactions refers to the type of social interaction behaviours that were observed during interactions. These descriptions were derived by examining the descriptive data of Max's initiations and responses in each social interaction and generating a list of common interactive behaviours. Eleven baseline observations ( $x = 60$  minutes), were conducted over a period of four weeks to collect the baseline data. Eight observations were conducted in the classroom and three observations in the playground. It is shown in Table 2 that although Max was not verbal he had a variety of interactive and communicative behaviours.

**Table 2. Max's Interactive Behaviours.**

Interactive Behaviours (Primary Means of Initiating and Responding)
Smiling
Eyepointing / Eye Contact
Fingerpointing
Nodding Head for 'Yes'
Shaking Head for 'No'
Laughing
Crying
Touching
Inaudible Verbal Talk
Babbling
Waving Arms

*Number of Reciprocated Interactions*

Data on reciprocated interactions were collected by direct observation in both the playground and the classroom. The total number of reciprocated interactions over the eleven baseline observations was forty-six. There were thirty interactions in the classroom and sixteen interactions in the playground. The mean number of reciprocated interactions per session in the classroom was 3.75 (sd 2.7) and in the playground 5.33 (sd 1.2).

*Number of Initiations by Max*

The data on the number of initiations by Max were determined by calculating the number of times he initiated to a peer per session. The mean number of initiations per session during baseline was then calculated. Results showed that during baseline, Max's rate of initiations was very low. During the eleven observation sessions, Max only initiated to his peers on three occasions, these all occurred in the classroom. On the occasions that Max did initiate toward his peers, they were often misinterpreted by the child that they were directed to. For example, on one occasion Max grabbed a boy's ear, in an attempt to get his attention. The boy replied "Don't Max", and then moved his chair away out of Max's reach. The mean rate that Max initiated per session to his peers in the classroom was .37 (sd .78) and in the playground was 0 (sd 0).

#### Number of Initiations by Peers

The data on the number of initiations by peers were determined by calculating the number of times a peer initiated to Max per session. The mean number of initiations per session during baseline was then calculated. The results show that Max's peers initiated more towards him than he did towards them. In total over the eleven observations, they initiated to Max sixty-five times, thirty-four times in the playground and thirty-one times in the classroom. During baseline in the classroom setting, the mean rate of initiations by peers towards Max per session was 3.8 (sd 3.2). During baseline in the playground setting the mean rate of initiations by peers towards Max per session was 11.3 (sd 3.3).

#### Number of Responses by Peers

This analysis concerned the rate in which peers responded to Max's initiations. The baseline data show that Max initiated to his peers three times during baseline and all three of these initiations were responded to by his peers.

#### Number of Responses by Max

This analysis concerned the rate in which Max responded to peers initiations. The results show that Max responded to peers initiations with a high frequency in the classroom setting. During baseline in the classroom he responded to 90% of peers initiations, and in the playground 52%.

#### Duration of Interactions

The mean duration of interactions per session during baseline was in minutes. During baseline the mean duration of interactions per session in the classroom was 3.5 (sd 3.2) minutes. The mean duration of interactions per session in the playground was 6.7 (sd 5.4) minutes.

#### Turn-Taking of Interactions

The number of turn-takes in each interaction was also recorded. Turn-takes indicate the degree of complexity of interactions. This analysis was concerned with the number of turn-takes in each social interaction per session. The data show that during baseline, 33% of the interactions were initiations where there was no response. Initiations that were followed by a response accounted for 41% of interactions, interactions where there was one turn-take accounted for 18% and multiple turn-takes for 8%.

### Types of Social Interactions

The second research question addressed in the case study was: what types of social interactions were observed between Max and his peers?

The descriptive or anecdotal data were examined to allow an investigation into the types of social interactions and relationships that Max was involved in with his peers at school. The data was coded according to predetermined categories established by Challenger, Brenneman, and Staub (1995). They included the following relationships: (a) helpee; (b) helper; (c) conflictual; and (d) play and companion. 'Helpee' referred to interactions where the child with a disability was helped by peers without disabilities. 'Helper' referred to interactions where the child with a disability was helping the peers without disabilities. 'Conflictual' referred to interactions between children about the child with a disability that were negative, or interaction between the child with a disability and peers without disabilities that were negative. 'Play and companion' referred to interactions between the children with and without disabilities that were friendly and nurturing. These types of relationships were being shaped by a number of different things that were going on in the classroom and the playground settings.

#### Helpee

By far the largest number of Max's interactions were those where Max was being helped by a peer. Within this 'helpee' category I developed five 'subcategories' of interactions. These were competitiveness over ownership, babying, helpfulness, choices and decision making and taking on the teacher role.

#### *Competitiveness over Ownership*

This refers to interactions where Max was treated as an object or mascot and was fought over by other children for ownership, as the following example shows.

A boy was wheeling Max around the playground during lunchtime. A group of girls were asking if they could have a turn pushing Max. The boy said "No, I am pushing Max, I am the boss of him. Whoever pushes Max is the boss of him".

In this episode it is difficult to determine if the children are competing for the role of 'boss' or if they simply want the opportunity to be with Max. Either way Max has become an object that these children are competing for. This

example highlights Max's unequal status and his powerlessness in this situation. There was much open competition for Max's attention. This usually occurred between the girls. As noted in the second example below, Max did not like being fought over.

The teacher asks the children in the class to choose a partner for the birdie dance. Two girls both want to be Max's partner. The girls ask the teacher aide if they could be Max's partner. The teacher aide tells the girls to ask Max themselves. The girls both ask Max, Max smiles at one of the girls and the other girl goes away crying.

Two girls each hold up a book so Max can choose which one he would like read to him. They are each encouraging Max to choose theirs. Two other girls come over to Max and stand beside him. Max starts to cry.

This competition for Max's attention may have been due to a number of reasons. It may have been to obtain praise and approval from the teacher, because of their perceived ideas on girls' roles or their ideas on helpfulness. It was observed on many occasions that when a child interacted with Max they would often then seek out reinforcement from both the teacher and the teacher aide. This was especially true of the girls. This reinforcement was often given voluntarily by the teacher.

Two girls were talking to Max and showing him a toy. The teacher gave the three of them a sticker each, "for playing nicely together and for sharing".

Kishi and Meyer (1994) state that "helping interactions between children with and without severe disabilities appear to run the risk of attracting primarily girls, some of whom may be motivated primarily by adult attention" (p. 287).

### *Babying*

'Babying' referred to interactions and discussions that focused on unequal relationships between Max and his peers. This inequality could be seen in the ways some of the children spoke to and interacted with Max. They would often put on a 'baby' voice when speaking to him, especially the girls. These are not the characteristics of typical equal social relationships between children. Whilst it is not uncommon for children to play these games and nominate a baby, children with disabilities are often placed in less powerful stereotypic roles.

Two children (a boy and a girl) were talking to each other about Max (while they were wheeling him around the school). The boy said to the girl "Max is a baby to me. He's six, nearly seven, but he's still a baby to me".

Two girls were talking , one girl gave Max a Christmas decoration to play with. She said to the other girl "This will keep him happy for a wee while".

Also of interest was a physically small girl who started school midway through the study. This girl was considered a baby by other children. They would come up to her and say "Are you a baby?" Older girls would look after her during lunchtime. This girl after a week at school decided that she would 'look after Max'.

### *Helpfulness*

In some instances children provided spontaneous voluntary assistance to Max as they would to any of their peers. This was most frequently observed when the class were working in co-operative groups or on co-operative activities and tasks.

An instance of this occurred when the children were cutting pictures out of magazines to make Christmas cards. Max was having trouble using the scissors. A boy demonstrated to Max how to use the scissors "Put two fingers in there and go cut, cut, cut".

The children would often watch out for Max and comfort him if he appeared to be distressed or upset. They would for example say "It won't hurt you, It won't hurt you", "Are you all right?", "Are you tired Max? "What's wrong, Max?" They seemed genuinely concerned.

### *Choices and Decision Making*

Often Max's peers would make decisions for him without asking or consulting him first. These were predominantly interactions where they assumed which activities Max would like to play with or participate in.

The children would assume without asking him that Max would like to be read a story. "We'll read you a story". They would go and choose a book themselves and start reading it to him.

During the class presentation I talked about this and told the children that they should first ask Max if he would like to have a story. They could then get a selection of books, and ask Max which one he would like to read. He would then either handpoint or eyepoint to the book he would like. After this discussion a change was observed in their behaviour.

The teacher aide told me that Jacob was good today. He asked Max if he would like a story. Max nodded his head "Yes". Jacob went over and picked out two books. He held them up for Max to chose which book he wanted.

#### *Taking on the Teacher Role*

This involved Max's peers taking on the stereotypical teacher or mother role. The children were seen to model teacher language and behaviour. The children would direct and instruct Max to behave in certain ways. They would also tell each other how to interact with Max.

A girl reads a story to Max during the class library session. Chanelle tells the girl that she is not reading it properly. The girl goes away leaving Chanelle to read Max a story.

#### Helper

I did not observe Max acting as a helper to his peers without disabilities.

#### Conflictional

I also did not observe any verbal or physical conflict between Max and his peers. This seems problematic because all children have fights and fallouts with each other. Could this be a sign that Max is not considered 'one of them', so therefore could not fall out with his peers? Conflict was however observed between other children about Max. This usually took the form of competition for Max's attention, or one child telling another child how to interact with him.

A girl reads a story to Max during the class library session. Chanelle tells the girl that she is not reading it properly. The girl goes away leaving Chanelle to read Max a story.



### Play and Companionship

Within this 'play and companionship' category were two 'subcategories' of interactions. These were supportive body contact and encouragement.

#### *Supportive Body Contact*

This was seen when children touched Max in a friendly and caring way. It was more often the peer who initiated these interactions. These gestures were all 'nice' touches, in no way negative and involved any roughness, physical harm or intention to hurt. They were often a way of obtaining Max's attention. These gestures usually involved a female, as was the case in the following two examples.

Anne-Marie was wanting to read Max a story. He was not looking at her, so Anne-Marie said "Max" and touched his forehead gently.

Alice was sitting on the mat beside Max who was sitting in his wheelchair. Alice took Max's hand and held it while listening to the story read by the teacher.

#### *Encouragement*

The children would often offer Max encouragement or praise him for something he did or achieved. This appeared to be done with the best intentions, and Max would often smile or laugh in response.

On one occasion Max was showing the children in his class how he was learning to walk. Max's parents, the classroom teacher, the teacher aide and Max's peers were present, as well as myself. Many of the children offered encouragement - "Good boy Max" , "Come on Max". All the children clapped when he was finished.

The findings on the types of interactions between Max and his peers were similar to findings identified in past research. Schnorr (1990) used qualitative research techniques to assess seven-year-olds' perspectives on a part-time mainstreamed student who was also seven. One of the findings was that the children without disabilities viewed the child with a disability as younger than themselves even though they were the same age. This seems to be similar to the children identifying and interacting with Max as though he was a baby.

Green, Mactavish, Schleien, and Benepe (1995) found in their study that looked at arranged partnerships with peers with disabilities that the resulting relationships were often big brother or big sister type relationships, rather than friendships. These relationships are similar to the type of relationships observed between Max and the older children who wheel him around the school at lunchtime. The authors stress that we should not assume that these types of relationships are undesirable, because often the person with a disability perceives these relationships to be true friendships.

Hall (1994) found that some of the children in her study were mothering or bossy towards the child with a disability. These children were all females and were of low social status as assessed by using a peer nomination sociometric measure. Similarly, Evans, Salisbury, Palom, Berryman and Hollowood (1992) found that a common form of interacting resembled parenting. These results seem to be similar to the interactions observed where the children took on a mothering or teacher role when interacting with Max. The children without disabilities often related to Max as if they were an adult and he a younger child. These interactions were more control-and-demand oriented and are not the type of interactions that lead to the development of friendships.

### Effects of the Intervention

The third research question addressed in the case study was: what was the result of implementing an intervention designed to increase or improve social interactions between Max and his peers?

### Summary of the Intervention

A twenty-five minute presentation on disability awareness was presented to twenty-three of Max's classroom peers and the classroom teacher on a day when Max was absent from school. The presentation involved showing and explaining a poster that pictorially presented Max's interaction behaviours. A three minute video of Max's interaction behaviours was also shown and discussed. Two days later small group discussions were held. In these groups (of four to six children) we talked about the information I had presented two days previously. I then read the children a book that told Max's story, describing Max, his family, his disability, and what he liked doing. We also discussed ways they could interact with Max now that they were more aware of his interactive behaviours and what they meant. A similar twenty minute presentation was delivered to interested staff members and the principal during a lunchtime two weeks after the class intervention (see Appendix I).

*The Effect of the Intervention on the Number of Reciprocated Interactions*

Figure 1 presents the number of reciprocated interactions in the classroom across conditions. As presented earlier, the number of reciprocated interactions during baseline was less than four per session, except one occasion when it was ten. The mean number of interactions per session was 3.7 (sd 2.7). Following training, the mean number of interactions per session increased to 4 (sd 2.5), and during follow-up increased further to 5.7 (sd 1.3). Figure 2 presents the number of reciprocated interactions in the playground across conditions. As presented earlier, the number of interactions per session during baseline was 5.3 (sd 1.2). Following training the mean number of interactions per session increased to 7 (sd 4.2), and declined during follow-up to 3.5 (sd .5).

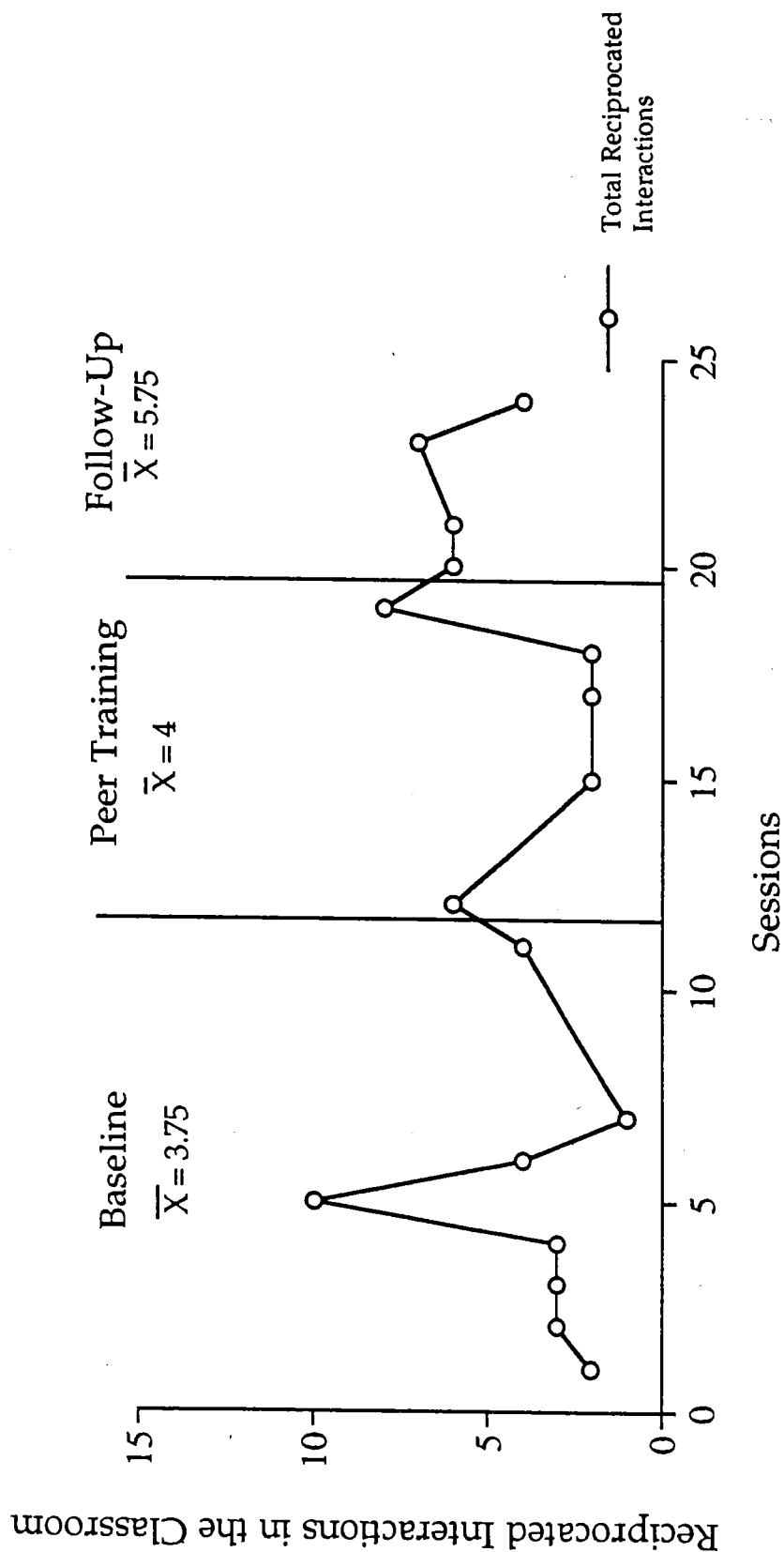


Figure 1. The total number of reciprocated interactions between Max and his classroom peers during baseline, peer training and follow-up.

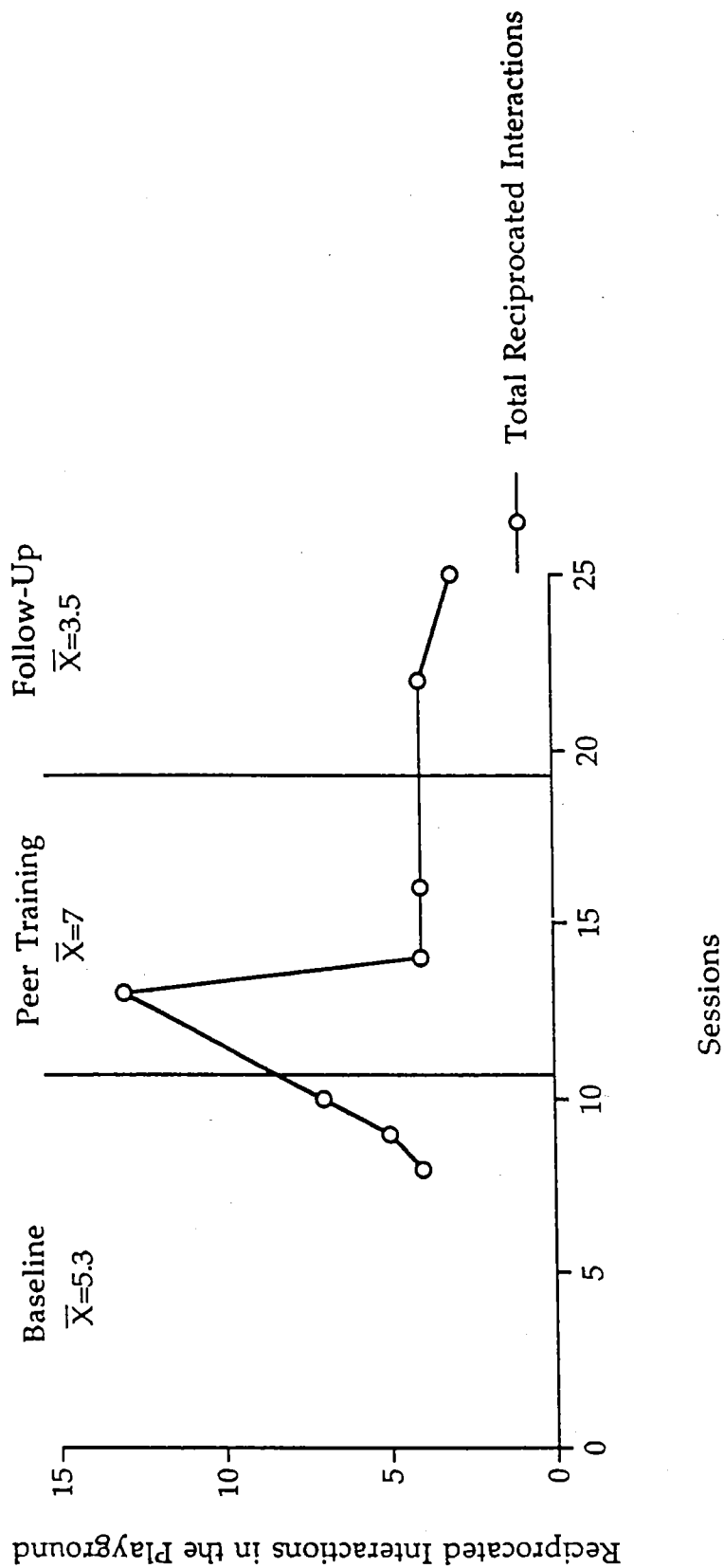


Figure 2. The total number of reciprocated interactions between Max and his peers during baseline, peer training and follow-up.

The mean number of reciprocated interactions between Max and his peers increased over the course of the study but as shown the standard deviation was very high. Rates of interactions varied greatly from session to session, perhaps due to the activities or task the children were required to be participating in at that particular time, especially in the classroom context (Schleien et al, 1995, p. 410). This could possibly be more a result of available opportunities to interact rather than the desire of the children to do so. As with the other results in this case study, there was a dramatic increase during the follow-up period which again may be a result of the classroom culture or other factors rather than the intervention itself.

#### *The Effect of the Intervention on the Number of Initiations Made by Max*

The results indicate that Max did not appear to have a clear preference towards initiating to boys or girls. Three out of the four initiations were directed towards girls, but two of these were teacher aide directed. As described in the results section, Max's rate of initiations remained low following the training of his classroom peers. These results may, however, be due to the lack of opportunities or control that Max has in determining his own interactions. For example, because Max cannot push himself in his wheelchair he has to rely on someone else to push him. During lunch in the playground setting, Max has been wheeled around by girls only and they generally determine where he is wheeled in the school grounds and with whom he gets to interact. This situation changed in 1996 however, because a roster was established which included both boys and girls. I also question whether the results for Max's responses improved not because of an increase in his response rate, but because I could recognise more easily what his response behaviours were as the study progressed. The reliability data however, do not seem to suggest this. These results are however difficult to assess with a high level of certainty. This is because the initiations occurred with such a low frequency that one instance of the behaviour changed the results significantly

These findings are similar to the results found by Schleien, Mustonen, & Ryders (1995) in their study of children's social interactions. In their study of children aged 4-8 years and 7-11 years there were no increases in the number of initiations by the children with disabilities towards their peers without disabilities. Similarly, Roeyers (1995) carried out a study which aimed to increase peer-directed behaviour using a peer-mediated intervention. The findings showed that generally there was an increase in interactions, and a

shift from negative to more positive interactions. However, there were no improvements or increases in the social initiations of the children with disabilities.

*The Effect of the Intervention on the Number of Initiations Made by Peers*

This analysis concerned the rate of initiations to Max by his peers without disabilities. As shown earlier, in the classroom setting the mean rate of initiations by peers towards Max per session during baseline was 3.8 (sd 2.4). During training this rate increased to 4.6 (sd 2.8) and increased further during follow-up to 4.8 (sd 1.1). As shown earlier, in the playground setting the mean rate of initiations by peers toward Max per session during baseline was 11.3 (sd 3.3). During training this rate declined to 7.6 (sd 3.7) and declined further during follow-up to 6.5 (sd 1.5).

Initiations by peers in the playground setting declined over the course of the study. This seems to be congruent with the results that Max's rate of responding in that context was low. It makes sense that if initiations are not regularly being responded to, i.e., if they are not being reinforced then the number of initiations will decrease. The peers that wheel Max around the playground were not part of the intervention. There are however other reasons that may have accounted for these results. One plausible reason was my presence as the researcher, especially in the playground context where my presence was obvious. During lunchtime, Max is pushed around in his wheelchair by an older peer, so I therefore had to walk beside them around the school in order to record any social interactions that occurred. Having an adult present may have discouraged some children from approaching Max. My presence also provided competition for Max's attention. The girls pushing Max around often spoke to me, occasionally for lengthy periods of time. For example, on one occasion after speaking to me for most of the lunchtime, Sarah said to her friend Michelle who was also walking with us, "Ooh we haven't been talking to Max. Yesterday we asked for two balls and we played ball with him".

The initiations made by Max's peers in the classroom did not decline over the course of the study. This distinction is important because past studies have shown that initiations made by peers may decline if the child with a disability is not responding to them. Schleien, Mustonen, & Ryders (1995) examined the effects of participating in inclusive art programmes with age-appropriate peers without disabilities on social interactions. Two groups (4-8 years and 7-11 years) of students with autism and moderate to profound mental

retardation participated in the study. There was an increase in positive initiations by both groups of children without disabilities toward their peers with disabilities following the intervention. However, for the older group of children this increase declined over a short period of time and returned to baseline levels.

#### *The Effect of the Intervention on Gender Differences in Initiations*

This analysis concerned the rate of initiations made by peers according to gender. As shown in Table 3, 19% of initiations during baseline were made by boys, these increased to 42% during training, but then declined to 25% during follow-up. During baseline therefore, 81% of initiations were made by girls, these declined to 58% during training, but then increased to 75% during follow-up.

**Table 3. The Percentage of Initiations Made to Max By His Peers during Baseline, Training and Follow-Up Phases According to Gender.**

Phase	Boys	Girls
Baseline	19%	81%
Training	42%	58%
Follow-Up	25%	75%

These results are interesting because during the 1995 school year, there were only four girls in Max's class out of a total of sixteen students. During the 1996 year, there were only seven girls in the class out of a total of seventeen students. Kishi and Meyer (1994) found in their study that girls "were more positive and accepting than boys, and were also more willing to initiate social contact" (p. 285). They also found that of the boys who did interact they were more likely to be high status boys, while more girls, were considered low status.

#### *The Effect of the Intervention on the Responses of Peers*

The analysis concerned with the rate at which peers responded to Max's initiations showed that Max initiated six times toward his peers without disabilities. All of these six initiations were responded to by the children, although as described previously, twice the child misinterpreted Max's intentions. An alternative intervention may have been to teach Max to initiate to his peers.



### The Effect of the Intervention on the Number of Responses by Max to Peer Initiations

As shown in Table 4, Max responded to peers initiations with a high frequency, especially in the classroom setting. During baseline in the classroom Max responded to 90% of peers initiations, and 88% and 100% during intervention and follow-up, respectively. In the playground setting, during baseline he responded to 52% of peers initiations. This rate increased to 69% and 100% during intervention and follow-up. During the follow-up phase it can be seen that Max was responding to all initiations by his peers in both the classroom and the playground settings.

**Table 4. Max's Response Rate to Peers' Initiations during Baseline, Training and Follow-Up Phases across Settings.**

Phase	Classroom	Playground	Overall
Baseline	90%	52%	80%
Training	88%	69%	81%
Follow-Up	100%	100%	100%

Max's rate of responding was lower in the playground context than in the classroom, although this rate did increase after the training of Max's classroom peers. The descriptive data provides information about these results and provides some reasons that may account for the lower rate of responding. It appears that one reason may be that the children initiating to Max are not aware that it takes him longer to respond. They would often say "Hello Max", and then walk away without waiting for a response. Another reason is that often the older peer wheeling Max around would talk to him while she was standing behind him, which made it harder for Max to know when to respond, and did not allow the girl to know that Max had responded because his responses were often non-verbal. A third reason may be that Max did not wish to communicate with the peer who was initiating to him so he ignored them.

### The Effect of the Intervention on the Duration of Interactions

Figure 3 shows the total duration of interactions in the classroom across conditions, while Figure 4 shows the total duration of interactions in the playground across conditions. As shown earlier, the mean duration of reciprocated interactions per session during baseline in the classroom was 3.53 (sd 3.2) minutes. Following training, the mean duration of interactions was 4.14 (sd 4.6) minutes. During follow-up, the mean duration of

interactions was 11.9 (sd 3.3) minutes. Also as shown earlier, the mean duration of reciprocated interactions per session in the playground during baseline was 6.72 (sd 5.42) minutes. Following training, the mean duration of interactions per session was 4.9 (sd 2.8) minutes. During follow-up, the mean duration of interactions per session was 16.6 (sd 6.4) minutes.

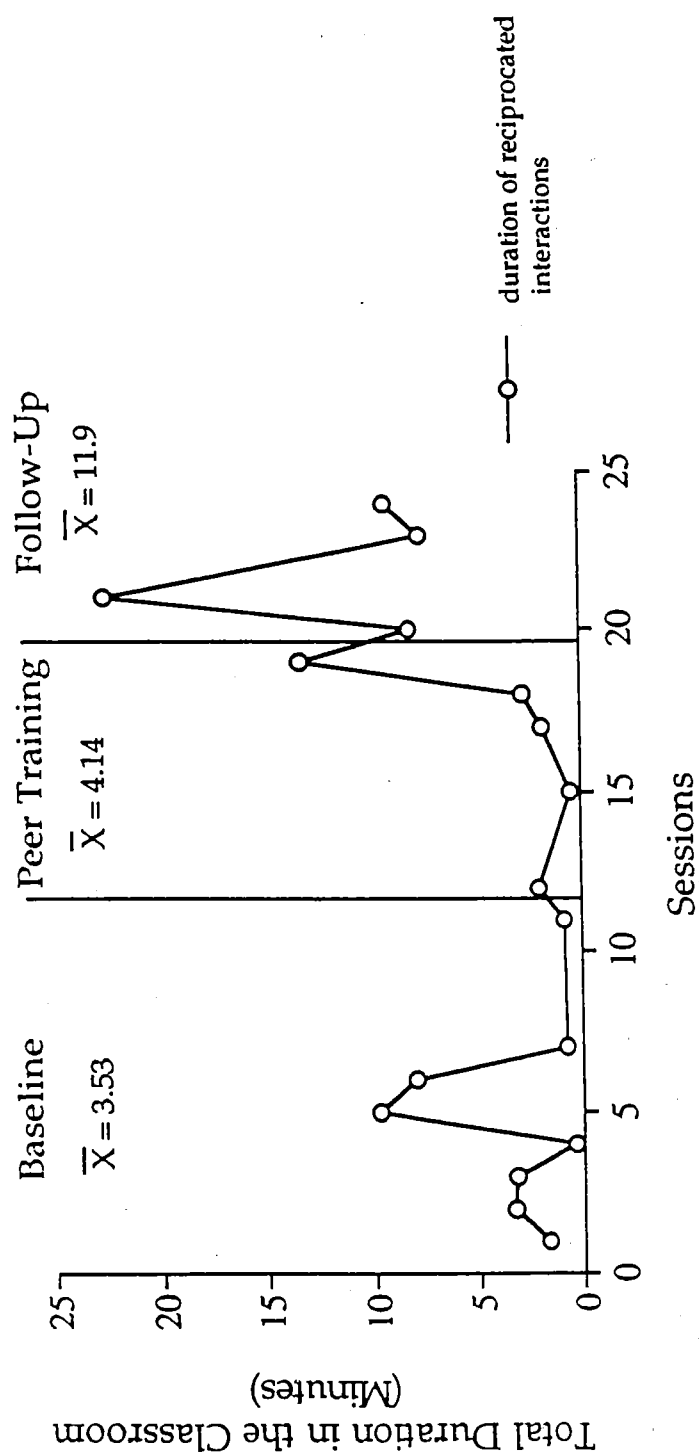


Figure 3. The total duration in minutes of reciprocated interactions in the classroom between Max and his classroom peers during baseline, peer training and follow-up.

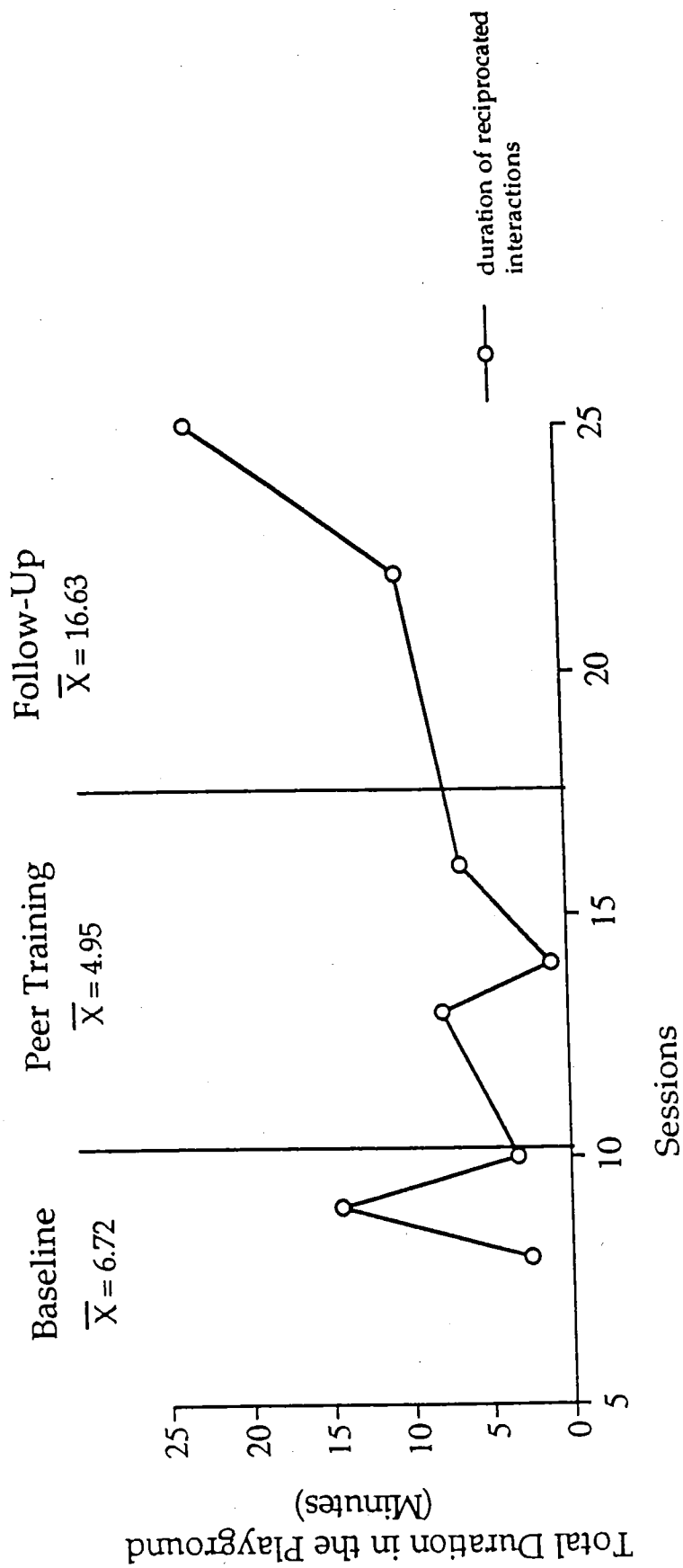


Figure 4. The total duration in minutes of reciprocated interactions in the playground between Max and his peers during baseline, peer training and follow-up.

In the classroom, the duration of social interactions increased following the intervention. In the playground, the duration decreased, but it was only the classroom peers who were included in the intervention not other children in the school. It may have been a good idea to include in the intervention the children who wheel Max around the school during lunchtime. However, again the standard deviations were high because of the large variance in the duration of interactions across sessions. A dramatic increase was also observed in the follow-up, again suggesting that other factors may have been having an influence.

#### *The Effect of the Intervention on the Number of Turn-Takes during Interactions*

Figure 5 shows the percentage of different interactions across conditions. Initiation refers to when there was an initiation with no response. Initiation and response refers to an initiation that was responded to. One turn-take refers to an initiation-response sequence followed by a further response. Multiple turn-takes refers to an initiation-response sequence followed by multiple responses.

As shown earlier, during baseline there was a high rate (33%) of initiations by peers that were not responded to. Following the training of Max's peers, the number of initiations without a response decreased to 19%, and during follow-up further declined to 18%. During baseline the majority of the interactions were initiations where there was a response, but the interactions did not continue (41%). This rate was the same after training, and increased slightly during follow-up (47%). During baseline 18% of interactions included one turn-take. Following training this increased to 34%, however, during follow-up this declined to a level lower than baseline (17%). During baseline only a small percentage of interactions included multiple turn-takes (8%). Following training this rate was 7%, and during follow-up increased to 18%. Interactions between Max and his peers became more complex during the course of the study. Rather than children saying "Hello" to Max and discontinuing the interaction, they would engage in longer reciprocal interactions, usually around an activity such as reading or a game.



## Discussion

This study was designed to examine the social interactions between Max who has a severe developmental disability and his peers without disabilities in the regular classroom and the playground. A further purpose of the study was to assess the effects of an intervention aimed to improve or increase social interactions between Max and his peers. So what do these results tell us about Max's social interactions and relationships?

As discussed earlier, the results of this case study appear encouraging. The intervention did appear to have an effect on interactions by increasing the numbers of reciprocated interactions, their length and complexity. It does however seem that other factors were influencing these interactions and relationships. These influences were not the focus of the study so were not studied in detail but do need to be discussed. One of these factors could have possibly been the school culture, which research has shown to have a large influence on the success of and acceptance and inclusion of children with disabilities. This school does appear committed to inclusion. When I gave my staff presentation more than half of the staff attended. The presentation was shown during their lunch-hour and attendance was voluntary. On another occasion one of the staff members came up to me while I was in the playground and was interested in the research I was conducting. Staff members appeared open to suggestions and new ideas, and were willing to make changes:

Max's mother said that the Principal was considering changing the day that the school held its weekly assembly so that Max could attend. She said it felt good that he was willing to do that for Max.

Another important factor on the successful social acceptance and inclusion of children with disabilities in the classroom is the influence and attitude of the adults in the classroom. Max's 1996 classroom teacher said to me that "she felt honoured that Max was in her class and she was hoping to get Max involved in the class as much as possible".

A further important factor seemed to be the communication between the teacher and the teacher aide. The classroom teacher would ask the teacher aide if she wanted any children to work with Max. She would also check

with the teacher aide if children were working with Max before calling all the children back onto the mat.

The role and influence of the teacher aide may also hinder social interaction (Rowan, 1992). DeKlyen and Odom (1989) found that children who had low peer interaction rates tended to have high teacher interaction rates. Unfortunately I did not record interactions between Max and his teacher and teacher aide. When a child with a disability has non-participatory supervision (shadowing) by the teacher aide, the other children in the class see the teacher aide as a helper. By default this makes the child with the disability the person who needs to be helped. When the teacher aide works on a one-to-one with the child with a disability they take on a gate-keeping role. This discourages children from interacting with Max, and results in the children speaking to the teacher aide rather than directly to Max. It was observed on many occasions that in the presence of the teacher aide the children without disabilities talked to the teacher aide about Max rather than talking directly to him. Before the intervention, the teacher aide would often answer these questions and make decisions for Max. After the intervention when we discussed this, the teacher aide communicated to the children that they should directly ask Max. I also discussed with the children during the follow-up session that they should talk to Max rather than always talking to the teacher aide.

The classroom teacher asked the children to pair off for the birdie dance. Two girls went up to the teacher aide and asked if they could be Max's partner. The teacher aide told them to ask Max who he would like to have as his partner.

The problems associated with gate-keeping and shadowing can be overcome by the teacher aide taking on a role in which they are the 'teacher's aide'. If they work with other children in the classroom, they can observe and monitor from a distance the child with a disability, they can encourage and facilitate social interactions and friendships, and can aim to help the child become more included in the classroom.

On the positive side some interactions were mediated by an adult (usually the teacher, or teacher aide). These were usually suggestions by the adult that a child interact with Max. In these instances the teacher aide usually left the area where the children were playing so they could interact without adult presence.



The teacher aide asked David if he would like to read Max a story. David said "Yes". The teacher aide left that part of the room. David went and picked two books and asked Max which book he would like. Max eyepointed to the book he wanted. David picked the right book and proceeded to show Max the pictures.

Another factor that has an influence on the potential opportunities for interaction is the layout of the classroom, including the way the desks are placed. During 1995, Max was seated at the back of the room away from the other children, however during 1996, Max was seated close to other children. This may in part account for the increased numbers of interactions found during follow-up.

Max has been set up as someone needing 'help' or assistance. Max's long term goal on his social domain on his IEP (October 1995) is to "Acknowledge the efforts of those who help him by a smile or eyepoint". Strategies and responsibilities for those who help Max are to "Tell Max what you have done for him and that you would appreciate his acknowledging that task". Although not intentionally, Max's peers have also been set up as helpers. During lunchtime children from the year five and six classes are rostered to wheel Max around the playground and take him to the library. Like the teacher aide, these older children act as gate-keepers so it is quite possible that Max's classmates and the younger children in the school did not interact with him because there were limited opportunities for them to do so. The children may have also decided that Max already had someone to play with (i.e. the older peer). This situation made it difficult for social interactions to be maintained because the 'helper' would talk to Max, but because they were not facing him, and he is not verbal, they could not see his response. These older children did however work things out for themselves.

I was talking to two of the year six pupils (both girls), when one of them said to me "Gemma and me worked out that if you ask Max what he wants or what direction, he may smile to let you know, or he may frown, or he may do nothing and you don't know".

As these results show there were many types of interactions and relationships observed between Max and his peers in the classroom and the playground.

## Conclusion

As with any research, this study has limitations. A primary limitation is that the presence of the researcher had an effect on the children's social interactions, especially in the playground where traditionally adults are invisible or non-existent. A second limitation was the definition of social interaction used in the study. During data analysis the definition as defined in the method section was found to be limited to one specific area. The definition was restricted to interactions involving two people rather than interactions involving three or more people. In the data analysis this problem was overcome by counting an interaction involving more than two people as separate interactions. A third limitation was that adult judgements were placed on the observations. Max and his peers were not interviewed as part of the study. It may have been beneficial to interview these children to get an insight into their attitudes, feelings, thoughts, and perspectives about their peer who has a developmental disability. I could have asked questions specific to observed interactions. A fourth limitation was that I did not observe another child in the class who did not have a disability. This would have allowed me to look at the influence of the setting and compare the data for the two children.

Further research on children's social relationships would benefit from using a qualitative approach. As can be seen from the results, although the quantitative component does give the reader detailed information about changes in social interactions after intervention it appears that the descriptive data offers a lot more insight. Interviews both formal and informal with peers, teachers and teacher aides, with specific focus on their ideas about the importance of social relationships would also have been beneficial. This would have allowed for a comparison between people's expressed attitudes about social relationships, and their actual observed behaviour. It may also have been valuable to ask the children without disabilities what they define friendship to be, and to ascertain from the child with a disability whom he or she considers to be a friend.

This case study was valuable because it provides me with more questions that need to be explored in the area of friendship for children with disabilities. It also provides a sound starting point because it describes in detail types of social relationships between children. I can now progress further and focus more closely on social relationships and the context in which they take place.

In the following two case studies I want to explore the social interactions that occur between children and to examine what is occurring in these two settings that is influencing, mediating, helping or hindering social interactions and friendships for these children. The best way to answer these questions is to use a qualitative research method.

## CHAPTER FOUR

### Methodological Issues

#### Methodological Issues for the Study of Children's Social Relationships

Case study one provided valuable data on social interactions between a child with a severe developmental disability and his peers. There were however several limitations which I feel were due primarily to my choice of research method. I found that a behavioural approach was not the most suitable method for studying children's social relationships. It became evident that focusing mainly on the behaviour of the child with the disability and ignoring the context of these interactions limited the research in a number of ways.

I started this research with the assumption that I could be objective and that there was one reality and universal truth. I assumed that I could observe what was going on and was naive to the importance of things that you cannot observe (feelings, thoughts, subtextual things). I assumed that the social interactions I observed would be the same as social interactions when I was absent. I realised the naivety of this fairly quickly, but did not know how to deal with this in the context of a behavioural study apart from including it as one of my limitations. Ballard (1994) states "The idea that we can be 'objective' is now rejected by many researchers. All of us, researchers included, see, interpret and understand our world through lenses coloured by our culture, gender, values, beliefs, prejudices, passions and experiences" (p. 22).

I felt uncomfortable recording and writing on the premise that I was an invisible unobtrusive researcher, especially when I participated fully on occasions in the school setting. I helped new entrants get changed for swimming and looked for many lost socks. I also went to end of year assemblies and concerts and even on class trips. At the time I did not record the data on these situations because they did not seem as important as the 'scientific number crunching' data that I was collecting. On reflection I can see the limitations of denying these influences as though they did not occur.

By starting out with an experimental inquiry the boundaries of the study were clearly defined, operationalised and constrained. One of my major concerns with using this methodology to study children's social relationships was the exclusion of the school setting. It seemed problematic to ignore the

context of the social interactions which were taking place. A further concern was my presence, my assumptions and biases as the researcher which were not taken into account using this methodology. As a result I began to question the value of behavioural research methods for the study of children's social relationships and also to question the underlying assumptions of this method.

As is evident in the first case study, I came from the positivist tradition, the paradigm of diagnosis and intervention and this was reflected in the previous literature review. This was the only paradigm that was available to me at the start of this research and therefore my discourse was to use a deficit model. My assumption was that children with severe developmental disabilities have problems with friendship. This led to a desire to 'fix' the 'problem' by designing interventions that would enhance interactions between my participant and the other children without disabilities. I did this unintentionally by failing to question the theoretical framework underpinning this approach. I found this to be not uncommon as Skrtic (1995) states that special education professionals, including researchers "rely too narrowly on theory derived from the disciplines of psychology and biology. The argument is that, by their very nature, these disciplines place the root cause of deviance within the person and exclude from consideration causal factors that lie in the larger social and political processes external to the individual" (p. 632).

This shift from a behavioural to a qualitative methodology was a difficult process. Two stages were involved. First of all was the physical process of learning to conduct research in a different way. The second and more challenging stage involved learning to understand the paradigms underpinning the two methods. Bogdan and Biklen (1992) define paradigm as "a loose collection of logically held together assumptions, concepts, or propositions that orient thinking and research" (p. 33).

On the one hand, quantitative research has functionalism as its theoretical basis and "assumes a single social reality to which humans merely react mechanistically" (Skrtic, 1995, p. 612). It is based on the assumption that "by employing the methods of the physical sciences, social science can discover objective truth about this reality and thus predict and control the way humans react to it" (Skrtic, 1995, p. 612).

In contrast, qualitative research has symbolic interactionism as its theoretical basis. This is premised on the assumption that there are multiple perspectives of reality and that "human experience is mediated by interpretation. Objects, people, situations, and events do not possess their own meaning; rather, meaning is conferred to them" (Bogdan & Biklen, 1992, p.36). Therefore behaviour can be understood only by entering into the defining process (Bogdan and Knoll, 1995, p. 680). In addition, symbolic interactionism is based on the assumption that it is possible to study the 'subjective states of others'. This is accomplished by analysing the world from the participant's point of view. Understanding how meaning is conferred requires the researcher to be able to get close enough to the participants to really know them rather than just focusing on the event or object in isolation (Bogdan and Knoll, 1995, p. 681).

Qualitative research has five characteristics. The first characteristic is that qualitative research has the natural setting as the direct source of data and the researcher is the key instrument. This is based on the assumption that human behaviour is significantly influenced by the setting in which it occurs (Bogdan and Biklen, 1992, p. 30). The second characteristic is that qualitative research is descriptive. The data collected are (or provide) rich and thick description and this is reflected in the written results which contain many quotations (Bogdan and Biklen, 1992, p. 30). The third characteristic is that qualitative researchers are concerned with process rather than simply with outcomes or products. The fourth characteristic is that qualitative researchers tend to analyse their data inductively. Data are not collected to prove or disprove hypotheses that were generated before the start of the study (Bogdan and Biklen, 1992, p. 31). The fifth characteristic is that "meaning" is of essential concern to the qualitative approach. Researchers are interested in the participants' perspectives and are concerned that they capture these perspectives accurately (Bogdan and Biklen, 1992, p. 32).

After reviewing methodological literature, I decided to use a qualitative observational case study design. I chose this design because qualitative case studies provide "an in-depth understanding of the situation and its meaning for those involved. The interest is in process rather than outcomes, in context rather than a specific variable, in discovery rather than confirmation" (Merriam, 1988, p. xii). Using this approach, meaning develops only through interaction with others. People define a given situation by the contact and influence of others around them (Bogdan and Knoll, 1995, p. 680). This methodology appeared to address the limitations I had encountered using a

behaviourist approach and seemed especially applicable for studying the social relationships of children.

After completing case study one, I realised that my theoretical perspective was based on the sociology of deviance although I was not aware of this at the time. I wanted to change my focus to a sociology of acceptance rather than entering the next two settings with the assumption that I would not see any caring relationships between the children with and without disabilities. I then began to grapple with the problem described by Fulcher (1995) of trying to resist the discourse of the deficit model when conducting the research. Fulcher asked herself the following critical question in her research "How could I research this topic without further entrenching the 'object' of the research? I saw the taken-for-granted object as the severely disabled person, seen as deficient" (pp. 8-9). I attempted to deal with this dilemma in the following two qualitative observational case studies by not making the two children labelled as 'severely disabled' my sole focus.

#### Qualitative Literature Review

Research has focused primarily on the difficulties in establishing and maintaining relationships between people with and without disabilities. This has been termed the sociology of deviance or exclusion. The sociology of deviance as a theoretical perspective has provided four insights in the study of relationships between people with and without disabilities. First, mental retardation is a social and cultural construct. Second, the label of mental retardation carries with it stigma. Third, labelling someone as mentally retarded creates a self-fulfilling prophecy. Fourth, institutions and organisations designed to treat or care for people with mental retardation create or reinforce behaviour that further distances people with mental retardation from the broader community (Taylor and Bogdan, 1989, pp. 23-24). Bogdan and Taylor (1987) however, state that by focusing on stigma and exclusion alone "sociologists have found it difficult to account for the caring relationship that exists between people who are different and typical people" (Bogdan and Taylor, 1987, p. 35).

The study of relationships between people with and without disabilities using qualitative methodology called for a new approach to the theory behind these relationships. The sociology of acceptance as a theoretical perspective was developed and "is directed towards understanding how those who are different, who might be termed deviant, come to be accepted by other people" (Taylor and Bogdan, 1989, p. 22). Taylor and Bogdan (1989) define an

accepting relationship as "a relationship between a person with a deviant attribute, in this case mental retardation, and a nondisabled person, which is long-standing and characterized by closeness and affection, and in which the deviant attribute, or disability, does not have a stigmatizing, or morally discrediting, character in the eyes of the nondisabled person" (p. 27). The sociology of acceptance looks to understand not only how people with disabilities come to be accepted in personal relationships, but also in groups, organisations, communities and society (Bogdan and Taylor, 1987, p. 35).

Until recently, the issue of friendship has been largely ignored in both theory and practice within the world of people with severe developmental disabilities. O'Brien & O'Brien (1993) discuss three common reasons why people ignore the issue of friendships for people with severe developmental disabilities. Firstly, people assume that friendship is not a problem for persons with disabilities because they already have all the friends they could ever need or want, especially among their "peers", other people with developmental disabilities. Secondly, people think that those with severe developmental disabilities lack the capacity to understand friendship as those without disabilities do, so therefore friendship does not matter to them. Thirdly, people say that friendship between those with disabilities and those without disabilities is an unrealistic dream, as they have too little in common to form friendships. These assumptions are clearly based on the sociology of deviance. Friendship is just as important for people with disabilities as it is for people without disabilities.

With the emphasis on context and meaning, qualitative research is useful for describing what detailed and complex relationships exist between children with and without disabilities and which factors influence these relationships. The following two studies focus on interactions and relationships observed in school settings, while the remaining three studies look at reasons that may account for the relationships that are identified.

A much discussed qualitative study conducted over a two year period by Murray-Seegert (1989), explored social relationships between high school students with and without severe developmental disabilities. In this study Murray-Seegert differentiated between different types of interactions that were observed, and the percentage of observations that were coded for each category. These categories were proximal, helping, reciprocal, mediated, and negative interactions. Proximal interactions referred to instances when there was some form of sensory contact between the student with a disability, and a



student without a disability. About twenty percent of interactions were in this category. Helping interactions referred to instances when a student voluntarily provided assistance or instruction to another student. Approximately thirty-seven percent of interactions were in this category. Reciprocal interactions referred to interactions which result in mutual though not necessarily similar benefits, and the student without a disability was not primarily assisting or instructing the student with a disability. About twenty-five percent of interactions were in this category. About ten percent of interactions were defined as mediated interactions which occurred when a 'helper' without disabilities promoted positive proximal or reciprocal contact between a student without a disability and a student with a disability. Negative interactions were defined as interactions that resulted in injury, when feelings of dislike, fear, or anger were expressed, or when one individual wanted to tease hurtfully or condescendingly to another. Only about six percent of interactions were in this category (pp. 88-90). Murray-Seegert found that within the high school context there were numerous examples of social relationships between students with and without disabilities and these findings suggest that many of them were caring and reciprocal relationships. Murray-Seegert criticises the value of studies that merely categorise interactions into positive, negative, or neutral, because they do not show or allow an in depth analysis of what is going on in that specific context.

Stainback, Stainback, Moravec, and Jackson (1992), explored what happens when students with severe disabilities are integrated into a regular school setting. The ages of the six students with disabilities in the study ranged from five years through to twelve years. Data collection involved in depth and informal interviews, observations, and journals. Data on social interaction were collected recording the number of interactions that occurred with comments about the nature of the interactions between the students with and without severe disabilities. Social interactions among students varied. Some of them were negative and were initiated by both the students with a severe disability and by their peers without disabilities. The majority of the social interactions were positive however (approximately 80% - 220 out of 273 observations). Students with and without disabilities frequently were observed playing together, helping each other, holding hands and generally 'hanging out' together. It was noted though that some students without disabilities were too overprotective or helpful towards their peers with disabilities. The results of this research are very encouraging but it must be noted that this research took place in a school committed to the full inclusion

of all students, regardless of ability or disability. This study highlights the importance of the environmental context for research looking at social relationships between children with and without disabilities.

Research by Hurley-Geffner (1995) raises some important issues in regard to social relationships between children with and without disabilities. She presents four factors that appear to limit the development of friendships between children with and without developmental disabilities. Those she suggests are (a) the opportunities that children with developmental disabilities have to interact with their peers without disabilities, (b) research placing too much emphasis on the development of social skills rather than focusing on the social relationships between children with and without developmental disabilities, (c) placing too much emphasis on the "deficits" of the child with the disability, and (d) viewing the child with the disability as incapable of forming meaningful social relationships (p.109). These suggested factors show the predominance of the sociology of deviance and the deficit model of disability.

Qualitative research with its emphasis on context has found that there are certain settings, backgrounds, and circumstances that tend to make people receptive to forming caring relationships with people with disabilities. The following are some conditions described by Bogdan and Taylor (1987) that appear to foster these relationships.

- People who have caring relationships with people who are different tend to be more open to other relationships with people with similar differences and to start those relationships less centered on the difference.
- Regular and positive contacts between disabled and typical people foster caring relationships. People cannot form caring relationships unless they meet.
- Positive interaction is more likely to take place in a pleasant environment where the disabled person is not in a group of disabled persons. When interactions occur in agencies or other segregated facilities, or where there are many disabled people, they are often confused and fearful.
- There are particular environments that are conducive to disabled and nondisabled people forming friendships when the people are satisfied and content, where there are norms of acceptance and respect for individual differences, where there are norms that support caring and mutual support and the people have a history of being included (p. 39).

Revised Research Questions for Case Studies Two and Three

Following my new focus on meanings and context, I had to change my research question so that it "fitted" with my new emphasis. In the following two case studies, I wanted to explore the social interactions and social relationships that occurred between children with and without disabilities. I wanted to examine what was occurring in these two settings that was influencing, mediating, helping or hindering social interactions and relationships for these children.

### Methods

#### Participants and Settings

This state primary school is located in a working class neighbourhood in a main city in New Zealand. Approximately one hundred and seventy students attend the school, from year one through to year six. Thirty-one percent of the children in the school are of Maori, Samoan, or other Pacific Island origin. The school has an attached unit for students with physical disabilities and a unit for students with special needs. Specialist facilities abound at the school with an occupational therapy room, a speech therapy room, a music therapy room, a physiotherapy room, a dining room and facilities for showering and toileting the children with disabilities.

I arrived at the principal's office at a pre-arranged time to discuss my research. My strategy was to approach the principal first rather than the classroom teacher, because I had information to suggest that the teacher of the class I would like to observe in would not be very keen on the study. I explained to the principal that I was interested in children's social relationships with a particular focus on the social relationships of children who have disabilities. I explained that I had a child in mind whose mother was very keen for her daughter to participate in the study. The principal said that he could see no problems, but he did request a photocopy of the parents' consent form. The principal then said "All of the classes have children with disabilities in them so the children are used to many visitors in the class, so they are quite sophisticated."

The principal then escorted me to the classroom, introduced me to the classroom teacher and told him I was carrying out research with a child in his class. This teacher has a number of years' teaching experience, and was at one stage head of the special unit at the school. Therefore, he has had a great deal of experience working with children with severe disabilities. I then introduced myself to the teacher aide who I found out later has had three years' teacher aiding experience and has completed a course on teaching people with disabilities. When the teacher introduced me to the class and said that I would be in the class for a while, many of the children said "Hello." He told the children "You are not to talk to or annoy her."

Approximately eighteen children with severe disabilities attend the school and there are other children with physical disabilities. Some of these students attend school part-time and go home at lunchtime while others attend full-time. The classroom of my particular focus has nineteen children in it. There are five girls and fourteen boys who all attend school full-time. There are three children in the class who have been labelled as having 'severe disabilities', and they are approximately one year older than the other children in the class.

Sally was aged seven years and six months when I first met her at the start of the study. Sally has Myotubular Myopathy, a form of Muscular Dystrophy. As Sally is not independently mobile she uses a wheelchair (which she can wheel herself, although slowly). She also uses a standing frame. Sally can handpoint and eyepoint, she can say "no", "yes", "here we are", "come here" and "hello". She is big for her age compared to the other children in her class, she has short brown hair and usually wears tights and a sweatshirt to school.

Other people mentioned in the study are Mr Thomas who is Sally's classroom teacher. Stacey is Sally's teacher aide and Aileen is the head of the dining room. Tracy, Martin and Tom are all students in Sally's class - both Martin and Tom have developmental disabilities.

### Data Collection

Three methods of data collection were used, participant observation, interviews and document analysis (Bogdan and Biklen, 1992: Merriam, 1989). Participant observations were conducted from mid-February 1996 through to mid-December 1996, although not on a continuous basis (see Appendix K). Visits lasted from one to two hours and included times when Sally was both present and absent. Observations were conducted in the classroom, in the dining room and in the playground. I attempted to write up my fieldnotes as soon as possible after leaving the field so that I could get down as much detail as possible. I did not take many notes in the field especially in the playground because it made me stand out as no other adults were taking notes.

Qualitative interviews vary in the degree to which they are structured (Bogdan and Biklen, 1992, p. 97). In this case study, informal conversations during participant observations with students, teachers and teacher aides and interviews with the focus student's parents contributed to the data collected. The initial interview with Sally's mother was very flexible and was

concerned with her perspectives on Sally's social relationships and friendships and her experiences with the school. A second interview conducted half way through data collection focused on my perspectives of what I had observed in the school setting. I did not use a tape recorder in either of the interviews because I wanted them to be informal so I could establish rapport, therefore both interviews were written up as fieldnotes. As data collection and analysis proceeded, later observations focused more on particular topics and issues concerning social interactions and social relationships generated from earlier observations and informal interviews.

An official school document, the school charter was also analysed. This document offers the 'official perspective' on the school philosophy, the aims of the school and the school structure (Bogdan and Biklen, 1992, p. 136). In total approximately 100 pages of fieldnotes were generated, based on about 25 hours in the setting.

#### Participant Observation

Jones (1991) reminds us that "we enter the school with a social positioning - as parent or teacher or employer or researcher - with a particular purpose which underlies our actions and thoughts there" (p. 14). I went into this school as a researcher with the purpose of examining both children's friendships and the context within which these relationships occur. Like Jones, I also went in with the purpose of gaining an advanced educational qualification (p.15).

My role as the observer in this study is best described as moderate participation. I had contact with many different people in the school setting and they all constructed my role in different ways. On some occasions I tried to resist the role they imposed on me but on other occasions I had no choice and had to accept the way they positioned me. Because I am an adult, I could not be a full participant in the classroom. However, conscious efforts were made not to take on the roles typical of the teacher and teacher aide in the classroom. As shown in the following two examples, this had to be made explicit to the children in the class at first until they became aware that I was not going to take on the role of monitoring their behaviour.

The bell had gone and the children were sitting on the mat. Some of them were talking loudly and being noisy. One of the children said "shhh, shhh", someone else said "there's another teacher in here" and

they turned around and looked at me. I replied "No, I'm not. You don't have to be quiet in front of me."

I walked over to the class to get my bag. The children were all sitting on the mat but when they saw me, they suddenly sat up very straight and folded their arms. I said "You don't have to do that when I come in."

These instances occurred early on in the study but as time progressed and I established rapport with the children, they came to see that I was not there to monitor their behaviour. Some of the children asked me if I was a student teacher or if I was 'Sally's helper' to which I replied "No. I'm here to see what you all do at school". This may have been because the teacher aide frequently asked me to help Sally into her standing frame or go with them to the therapy block for specialised services as the following example shows.

I returned to the classroom at 9.55 am with Sally and the teacher aide. A girl asked me "Did you go to the toilet with Sally?" I replied "I walked over with her." The teacher then told the girl off for talking.

In my observer comment I wrote that I felt as if it was my fault that this girl was told off by the teacher but I had to answer her question. I could not ignore her. Did this mean the children were not allowed to talk, or was this intended by the teacher to be a hint to me that I was not to talk to the children? I interpreted this as a hint that my role was the same as that of the children in the class, to sit and be quiet which may have been a reflection of my low status in the eyes of the classroom teacher. As Bogdan and Biklen (1992) have said "many observers of classrooms have situational constraints leading them to partake little in classroom activities" (p.88). My participation in the classroom was restricted by the teacher, the teacher aide and the climate and rules of the classroom.

"In a school, the formality of your dress can say something to others about who you are and with whom you identify" (Bogdan & Biklen, 1992, p. 91). For all of the participant observations, I dressed very casually. Usually I wore jeans, tracksuit pants or shorts because I did not want to be identified as an authority figure. This appeared to be successful because the children perceived me to be younger than what I am and did not identify me as an authority figure as the following example suggests.

It was a nice sunny day today so I wore casual shorts, a t-shirt and sneakers. I arrived at school at 12.35 pm and went straight over to the dining room. As I went in the main door a girl said to me "Are you here for sports?" I said "No. Sorry I'm not." I told Stacey what the girl had asked, she replied "Sixth formers from the local girls' school have been here taking sports. They are coming this afternoon."

### Data Analysis

The data from the classroom, dining room and playground observations and the interviews were analysed in the typical qualitative tradition. Although analysis is inductive and ongoing throughout the study, it was divided roughly into two stages. After completing six observations and becoming more familiar with the setting, I read through my fieldnotes and wrote myself memos about emerging themes and ideas, and possible relationships. This was my first attempt at looking for underlying patterns and conceptual categories that made sense out of Sally's social interactions and relationships (Merriam, 1988, p. 60).

The second and final stage of analysis occurred once data collection was completed. I broke up the text into small paragraphs and chunked the data into Bogdan and Biklen's (1992) family codes, setting and context codes, definition of the situation codes, perspectives held by the subjects codes, subject's ways of thinking about people and objects codes, process codes, activity codes, event codes, strategy codes, relationship and social structure codes and methods codes. I then sorted through the data and looked for regularities, patterns and topics and wrote down on a large sheet of paper words and phrases that represented these patterns and topics (p. 166). When all the data had been coded, I ended up with a list of 40 coding categories which were not predetermined but emerged from the data. These included codes such as "rules", "roles", "responsibilities", and "interactions between children" (see Appendix L). I then assigned a number to each coding category and assigned numbers to each piece of the data corresponding to the coding category that it fitted under. Some pieces of the data went under more than one coding category. I then worked with each code in turn and looked across codes to see if any themes emerged. I found that as I did this, the codes began to interconnect and overlap. From this analysis three main themes emerged, so the data was then re-examined and interpreted according to these three themes.



## Findings

In the process of observations, document analysis and informal discussions about relationships and friendships, three major sets of themes emerged. The first theme is medical institutional practices - a school structure with clearly defined rules and routine which is based on the medical model of disability. The second theme is opportunity - the opportunities available for Sally to interact with and get to know other children in her classroom and in the playground. The third set of themes are the characteristics of the interactions and relationships that I observed between Sally and her peers at school. Diagram 1 shows the interplay between these themes.

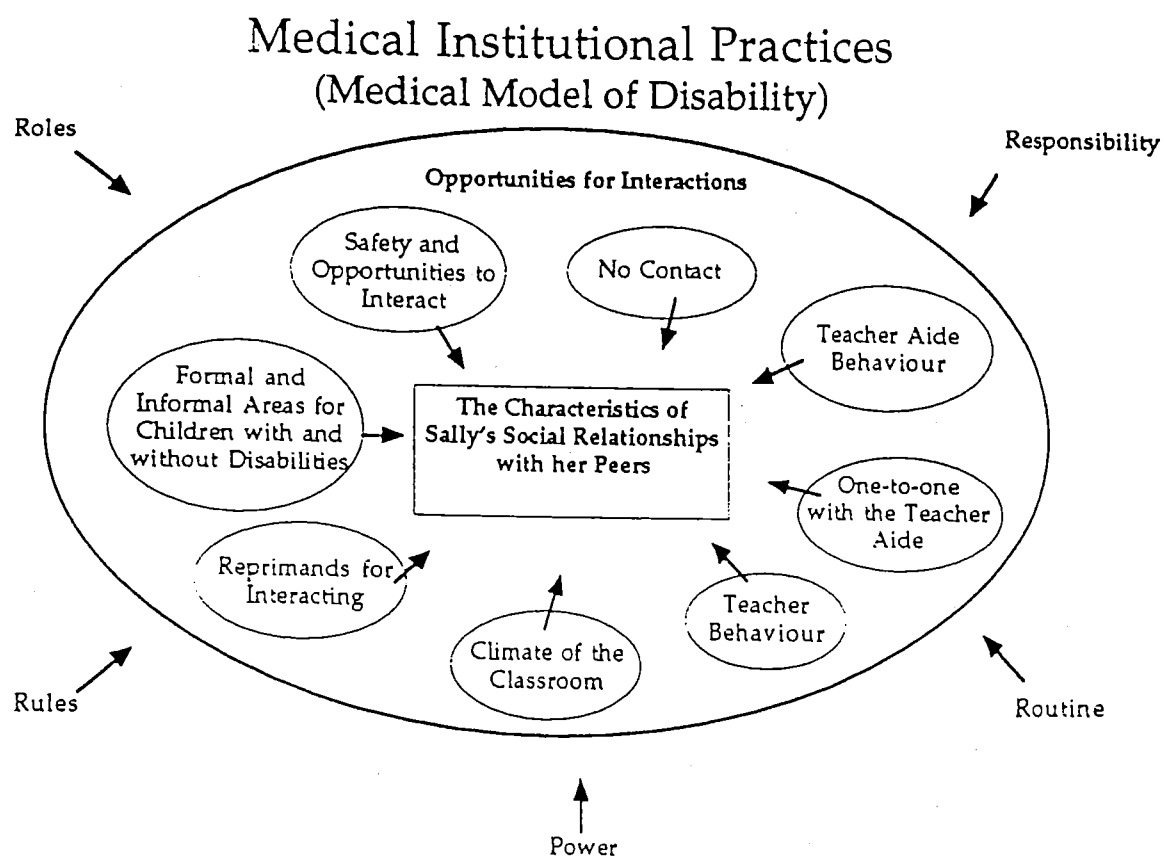


Diagram 1.

## Structures and Institutional Practices

The first and over-riding theme identified in the data was medical institutional practices. This theme looks at the macro level and has a number of characteristics. These include an institution with specialist staff and services, clearly defined roles and responsibilities and fixed rules and routine.

If a school is run on 'medical institutional', lines the institutional practices do not allow friendship to be considered by the staff. This school was set up as being a school that specialises in meeting the needs of children with disabilities. Therefore the school has a disproportionately high number of children with disabilities. The following public declaration was found in the school charter:

At South School we recognise the individuality of each child and aim to provide opportunities and resources which will enable all children to develop their social, intellectual, emotional and physical attributes to the fullest.

Inclusive education is the cornerstone of the programme at South School for children with special educational needs.

Although the school mission statement includes social development as a function of schooling, in practice this did not appear to be the case. This may have been the school's intention, but for various reasons including historical reasons, the medical model way of teaching children with disabilities did not allow this. The primary function of schooling for Sally and the other children with disabilities seemed to be to meet their physical and academic needs. It may be the case that Sally and the other children with disabilities are not included in the phrase "all children". Unfortunately there is no definition of inclusion in the school charter. It does however state that the segregated specialist facilities such as the dining room "further enhance inclusive education", this seems to be a unique interpretation of inclusion and differs considerably from Ryba's (1995) definition which places emphasis on acceptance and relationships rather than segregated facilities.

#### *Roles and Responsibilities*

Each of the staff members at the school has a clearly defined role and responsibility. The teacher aide rather than the classroom teacher is responsible for Sally in the classroom. In the following example when the teacher aide left the classroom, she passed the responsibility over to me rather than to the teacher.

When the teacher aide returned to Tom and Sally, she said to me that the class was going on a trip at 10.30 am. She was worried that she was going to miss out on morning tea. The teacher aide therefore left the

class at 9.50 am for a coffee, and asked me if I would mind "keeping an eye on them." Sally and Tom were left in their chairs on the mat while the rest of the children were still in their seats doing handwriting.

The following example highlights the teacher's lack of responsibility, as well as the impact of pull-out specialist services which do not seem to be co-ordinated with the classroom teacher.

I arrived at school at 12.20 pm. There were five girls and eleven boys in class today, but Sally wasn't in the classroom. I asked Mr Thomas where Sally was, he replied "I don't know where she is. She could be anywhere."

It seems that it is fairly common for "a teacher aide or assistant, without the benefit of training related to inclusionary practices, (to have) the primary responsibility for day-to-day decision making and program implementation" (Giangreco, Dennis, Cloninger, Edelman and Schattman, 1993, p.364). Unfortunately, "when paraprofessionals assume, or are directed to take, primary or exclusive ownership for the student's education, they may inadvertently create physical, psychological, or symbolic barriers to interactions between the teacher, classmates, and students with disabilities" (Giangreco et al, 1993, p. 371).

Aileen who is in charge of the dining room is responsible for Sally's eating and toileting needs. The physiotherapist and occupational therapists are responsible for her physical development and functional skills and the speech and language therapist is responsible for her communication. It seems that Sally has been split into separate bits rather than being seen as a whole person. All these bits have needs that have to be met and each person has been assigned a specific role in an attempt to meet these needs. As a result, friendship is a consideration but not one that is given specialist attention. There is no specialist for friendship and it is not anyone's role or responsibility. There needs to be an awareness that friendships do not always 'naturally' occur. There seems to be either a lack of awareness or a denial that relationships may need some help to develop. Because this school has such specialist services available, there is a denial that all the needs of the children with disabilities are not being met.

The head teacher in the special unit came over to me and asked "How is it going?" I replied "Really well." He said "This school is really good."

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The kids are included and interact naturally. They are not patronising. See, look at them (he pointed to two boys walking beside a boy in a wheelchair). In other schools, the kids can be really patronising."

These specialist services are provided out of the classroom. Giangreco and colleagues (1993) found in their study that 'pullout' methods to provide specialist services were often the result of separate frameworks and goals. In their study, teachers described problems with separate pullout services because starting and ending times were at times really disruptive and it was difficult to then fill in or get the child started on whatever it was that the rest of the class was doing (p.367). This appeared to be the case in Sally's classroom. She would come back from therapy and the class would be involved in an activity but she was not then invited or included in this activity. She had to sit passively until it was finished as the following two examples show.

When I arrived at school Sally was not in the classroom. I didn't know where she was. She arrived in the class at 10.50 am, wheeled in by a student teacher. Two children said "Hello Sally", but there did not seem to be any response from Sally. She was wheeled on to the mat and left by herself then the student teacher left the room. The rest of the children were doing story writing at their desks.

Sally left the classroom at 11.03 am to do stretches over at physiotherapy, she returned at 11.40 am. While Sally was away, the other children in the class were doing buddy reading in pairs. The teacher aide was not present in the class until 11.15 am because she was having her morning tea break. Tom was left by himself until she returned. He had been sitting in his wheelchair on the mat and no one had interacted with him (including the teacher and classmates).

These examples highlight the impact of both pull-out services and the classroom teachers' lack of teaching responsibility for the children in the class who have disabilities. Martin, Sally and Tom are seen as being the responsibility of the teacher aide. These examples also highlight the lack of shared routine between Sally and her peers in the classroom which limits opportunities to interact. Buddy reading would have provided an ideal opportunity for Sally to interact with other children in the class. Connected with the teachers' lack of responsibility and ownership is the apparent invisibility of Sally by both the teacher and the other children in the class.

### *Rules and Routine*

Clearly as a result of the school's institutional practices, the school organisation has strict rules and routines. Sally's routine is very rigid. This is a typical start to the day.

Sally arrived at class at 9.01am. No one, including the teacher or the children, took any notice of her. Sally wheeled herself slowly over to the mat. Mr Smith read out the roll. When he said Sally's name, she did not reply. The teacher aide lifted up her head and said "Don't be so rude." After the roll was completed, the children sat in a circle for news. The teacher missed out Sally and Tom when it came round to their turns. He returned to them when everyone else had had a turn.

The children then went to their desks and did story writing from 9.25 am. Sally was taken in her standing frame over to the back of the room away from the other children in the class. Sally had to point to pictures of what the weather was like outside (i.e., sunny, raining, cloudy, windy). Sally also had to point to what day of the week it was. If Sally did not point to it herself, the teacher aide would point to each picture or word and say "Is this what the weather is like outside?" or "Is this the day of the week Sally?". Sally would then answer "No" or "Yip".

### *Specialist Staff and Services*

Medicalisation has been linked with the rise of the institution and the segregation of people with disabilities. The medicalisation of disability has facilitated the development of a whole range of specialist workers such as physiotherapists and occupational therapists who have their professional practice structured by a discourse based on the medical model (Oliver, 1990, p. 48-52). Because this school is run on medical institution lines, there are a large number of support and specialist staff at the school. "The approach they represent implies that the purpose of special education is to fix students' problems. They suggest that difficulties in schooling belong to the student instead of being a product of school and student interaction" (Biklen, Ford and Ferguson, 1989, p. 262).

I attempted to disconfirm the hypothesis that because the school is run on 'medical institutional' practices, it has an effect on the way children interact with each other. I attempted to question the "us" and "them" discourse, by

changing the normal routine and breaking some of the informal rules. I did this by taking Sally around the playground during lunchtime and going to areas that are not usually 'visited' by the children with disabilities. I did this for three consecutive lunchtimes.

When Aileen came into the dining room, I said to her "Do you mind if I wheel Sally around for the next three days? I want to see if it increases her social interactions?". Aileen replied "No. That is fine because she just sits there if there is no-one to take her around. Do you mind sitting with her when she eats her lunch? I am short of helpers today." I said "That would be fine".

This interaction between Aileen and myself shows that I had to negotiate my role with her in order to get permission to wheel Sally around the school. The following example shows Sally resisting the usual routine and choosing the option usually available only to the children without disabilities.

I wheeled Sally outside the dining room and said to Sally "Which way do you want to go?" I pointed to my left and to my right. To my left was the door where the children with disabilities usually go out and where other children with disabilities sit and have their lunch. Sally pointed to the right so I wheeled her outside. Once we were outside I again said to Sally "Which way do you want to go Sally?" Sally pointed to the concrete path that runs through the playground. We then saw Adam (who has cerebral palsy) standing close by. Sally said "Hello" and Adam smiled at her. The three of us went out to the playground and Sally said to Adam "Here we are. Hello. Hello. Come here!" We walked up to where children were playing on the fort. Sally said "Here we are" to Adam. She was very verbal.

Our presence in the playground did not go unnoticed. We had many children come up to us. The following example suggests that it is unusual for Sally to be in this part of the playground and that she is perceived to be an observer rather than a participant. This seemed a fair assumption based on their experiences in the classroom.

I saw about half of the children in Sally's class playing on the grass so I wheeled Sally over there. Julie came up to Sally and said "Hello Sally. Are you coming to watch people play?" Sally said "Yes" and Julie ran off to play with the other children. Sally then said "Away, away" and

pointed in the other direction, I asked "Do you want to go away?" She pointed again so we left.

There were a number of interactions between Sally and other children. A lot of these took the form of children asking Sally questions about herself. These seemed to be questions that you would ask someone that you do not know very well. This suggests that these girls, even though they are in Sally's class, have never had this opportunity.

Natasha and Rachel came back and were asking Sally many questions like "How old are you Sally?" I think Sally may have said "Six" because one of the girls said "Six. You're not six. Do you have birthdays?" The other girl said "You have birthdays or you're not here". Sally and I continued to walk, and Natasha and Rachel came back over to us. Rachel said to Sally "Do you want to wear my hat, Sally?" Sally replied "Yes", so Rachel put the hat on Sally. The hat covered Sally's eyes and she could not see so they all laughed. Natasha and Rachel then went back over to the new sandpit which is not easily reached by a wheelchair because it has high sides.

Some rules cannot be broken. This example shows how routine affects interactions and the development of relationships.

Sally said to one of the girls "Hello". The girl came over and said "Hello, Sarah" (she got Sally's name wrong). The girl asked Sally "Have you got a sticker?" Sally said "No". The girl said "You silly billy, Sally. Yes you have. Can you shake hands? Do you want to shake my hands?" Sally and the girl shook hands. The girl then said "What are you doing, walking round? How old are you?" Sally did not reply so the girl asked me, "How old is she?" I replied "I don't know. How old are you Sally? Seven or eight?" The girl said to Sally "Are you seven or eight? I am ten and I'm in room ten". I said to the girl "I'm sorry but we have to go because Sally has to go to the toilet. Do you want to walk over with us?" The girl said "Okay" We walked over to the toilet and the girl opened the door for us. I said "Thanks, Goodbye." She left.

I did not find any disconfirming evidence. Instead I found evidence to further strengthen the hypothesis that the school structure has an effect on the children's social interactions and relationships. It appears that by changing the normal routine and breaking the implicit and explicit rules of



the school in regard to the children with disabilities, the characteristics of the interactions between Sally and the other children changed. The examples presented suggest that if the school structure would allow Sally and other children with disabilities to be active participants in the playground, there is the chance that friendships may develop. As these examples show, once children were given the opportunity they tried to get to know Sally better. It seems that this confirms that the school structure has an effect on children's social interactions and relationships.

The classroom teacher needs to take ownership and responsibility for Sally's academic and social needs both inside and outside the classroom. There needs to be teamwork among the specialists and the classroom teacher so there is a shared framework and common goals. This would include scheduling of specialist pull-out services so they occur at a time which does not interrupt important social times. Biklen, Ford and Ferguson (1989) suggest that for students with disabilities to escape the patient or client-like role in schools, they need to be allowed to be treated "the least differently as possible". This does not have to mean a denial of his or her disability but rather that special services need to be offered only when necessary and as unobtrusively as possible (p. 263). The following theme to be discussed examines the opportunities that Sally has to interact with her peers.

#### Opportunities to Interact

Sally's opportunities to interact with other children were limited because Sally was being pulled out of the classroom for specialist services, by the presence of informal and formal designated areas in the school for children with and without disabilities, by the children not being allowed to touch each other, by Sally usually working one-to-one with the teacher aide, by the children not being allowed to push Sally in her wheelchair and because of the teacher's style and organisation of the classroom.

#### *Limited Time Spent in Classroom and Playground*

Because of the school organisation, opportunities for interaction between Sally and her school peers were very limited in both the classroom and the playground. This is an important consideration for Sally, as she is out of the class for a significant proportion of the day for occupational therapy, physiotherapy, music therapy and speech and language therapy. Sally also spends half of her lunch-hour in the dining room with other students with disabilities eating her lunch and the last five minutes of lunchtime going to the toilet. This cuts down significantly the free time she has to spend with

her peers without disabilities. Schnorr (1990) carried out a study and found that "friendships were developed and maintained during free times. Identifying when and how students interact with their classmates is the first step. Ensuring that a student with a disability has access to these important times, as well as meaningful ways to participate, may be a prerequisite to developing relationships with classmates" (p.239).

#### *Formal and Informal Areas in the School for Children with and without Disabilities*

There were both formal and informal designated areas in the school for "us" (children without disabilities) and "them" (children with disabilities). The dining room where Sally eats her lunch is out of bounds for children without disabilities. Children are reprimanded if they come into the dining room to talk and interact with any of the children.

A boy came into the dining room and walked over to a boy in a wheelchair who had finished his lunch. Stacey said in a harsh tone "Go away. He has to go to Mr Smyth." (Mr Smyth does the toileting).

A teacher aide came into the dining room with two girls. One of the girls had ordered fish 'n' chips but had forgotten to pick them up so they were cold. The teacher aide asked Aileen if it was okay for her to use the microwave to heat them up. Aileen said it was okay. While the teacher aide was heating up the fish 'n' chips, the two girls went and stood by Melanie who was having her lunch. They said "Hello Melanie." Aileen came over and said to the girls "Go away. She's having her lunch." The teacher aide called the two girls over to her at the microwave and said "Come back here. She's busy." The two girls went and stood by the teacher aide over at the microwave which was in the corner of the room furthest away from any of the children.

It appears the teacher believed that if children come into the dining room to talk and play with the children with disabilities, this will hinder their progress in eating their lunch. This is the responsibility of Aileen, the head of the dining room, and she forbids children from entering the dining room and upsetting the set routine which seems to be very inflexible. There may be a number of reasons to account for this behaviour including a lack of awareness about social interactions or she may have been told to do this by someone in the school who has more power than she does.

Out in the playground there were informal areas in the school where the children with disabilities were usually seen. These areas were recognisable by the language people used and by observing where the children with disabilities were routinely placed once they left the dining room. In this example the language used by a girl, "Come to visit" suggests that this is Sally's area.

I was sitting observing in the dining room when Sally finished her lunch at about 12.55 pm. I went over to her. Aileen came over and asked "Do you mind wheeling her out with the others?" "Sure" I said, Aileen then said "Make sure you put the brakes on." I wheeled Sally outside to where Aileen had directed. There were about four or five other kids with disabilities outside finishing their lunch. I sat Sally next to another child and a teacher aide.

This sets up an "us" and "them" discourse which does not encourage interaction and the development of relationships. Instead it sets up segregated areas in a mainstream setting. In the classroom there were also informal areas for the children with disabilities. Sally's 'desk' was at a corner at the back of the room. She usually worked with the teacher aide facing the back wall. This meant it was not physically possible for Sally to interact with any of the other children, especially when she was in her standing frame. Sally's desk should be moved so there are no designated areas in the class for the children with disabilities.

#### *No Contact*

Opportunities for interaction between Sally and her peers were further limited by the children not being allowed to touch each other. This was the case for both children with and without disabilities. The school is trying to teach a social norm that you only touch your immediate family, the excessive touching of other people is considered to be deviant behaviour. I assumed that "no touching" between children was a school rule until I looked at the school rules listed on the classroom wall. There was no specific "no touching" rule but there was a rule which said "no pinching or pulling". This school rule has been generalised by the adults to all forms of touching between children. This cuts off a form of communication and interaction which is of particular importance for children who do not have conventional communication systems.

Singing finished at 9.35 am. The woman taking singing told all the children to stand up. Mr Thomas interjected before they could stand and said "Mrs Thomas. I noticed lots of children touching, fiddling with each other's hair, playing with each other". The woman replied "They know the school rule about touching, Mr Thomas". She then turned to the children and said "What is the school rule about touching?". They repeated after her "No touching, no touching".

This "no touching" rule was also applied in the dining room. During playtime and lunchtime, the children were placed around various tables with a teacher aide, volunteer or support person. There was usually one adult to each child. There was a large distance between the children so it was impossible for them to interact with each other. The only opportunity they had to interact was when there was a staff member away, and one adult had to feed two or more children.

At one stage Aileen was feeding two children because they were short of support staff. She therefore had two children (a boy and a girl) sitting next to each other. The girl reached out and touched the boy. She was told by Aileen "He doesn't want you touching him".

In direct contrast to this when children with disabilities are discouraged from talking and interacting with each other in the dining room, in the playground they are grouped together either under trees or outside the dining room.

Sally turns her chair round to face an empty class. I ask Sally "Is there anybody in the class?", she says "No". Tracy then returns. She is pushing a boy in a wheelchair. She says to this boy "You've come to visit Sally." She puts the wheelchairs so they are facing each other.

It seems that this is also about how the children have made sense of and interpreted the implicit and explicit rules and practices set up by the adults. Touching is an important part of communication and interaction. It should only be reprimanded or discouraged if it is dangerous or hurtful. Rather than reprimanding children for interacting with each other, adults should mediate and encourage interactions between the children.

### *Safety and Opportunities to Interact*

Opportunities for interaction between Sally and her peers were further hindered by the children not being allowed to push Sally in her wheelchair. This was for 'safety' reasons. In the parent interview, Sally's mother said to me:

Twice Sally was being wheeled around the school by children and had an accident when the wheelchair tipped and she hit her head on the concrete. A seizure followed which was diagnosed by the paediatrician as occurring as a result of the fall so the children are not allowed to wheel Sally around the playground.

Like the 'no pinching or pulling' rule which has been generalised to include all forms of touching, the rule that 'Sally has to push herself' has also been generalised to include children just standing beside Sally and touching her wheelchair.

I arrived at school at 8.45am. The bell rang soon after. Sally was still wheeling herself slowly down the corridor into the classroom. Tracy went over and stood beside Sally and was told by the teacher "Don't touch anyone when you're not asked. Sally has to wheel herself." This was said in a loud, punishing voice.

This "no pushing" rule was a real concern to me because there were no adults around at lunchtime to push Sally. Sally did not have the opportunity to interact with other children even if she wanted to, because the brakes on her wheelchair were always put, she could not take them off herself, and no other children were allowed to push her. There seems to be a link between safety and responsibility. If Sally wheels herself around at lunchtime the school is not responsible for the consequences. The following example highlights the interplay between the rules "no touching", "no pushing" and informal areas of play for the children with disabilities.

Out in the playground, another girl came over and said to Tracy "Who pushed Sally round here?". Tracy answered "Sally pushed herself". The girl replied "Good girl Sally. You clap your hands" (she takes Sally's hands and claps them together). Tracy said to Sally "Push." Sally said "Why?" Another girl answered "Because." Aileen came outside from the dining room "Don't push her, Tracy." I said to Aileen "No, she didn't." Tracy said "Sally pushed herself." Aileen said to me "Just don't

let anyone touch her. She can be around here, but don't let anyone push her."

Safety was also used as a reason for reprimanding and discouraging children from interacting with each other.

A girl came and stood at the dining room door but did not come in. When Aileen noticed her she said to this girl "Susie. Melissa has to go to the toilet first. I'll bring her out to the playground when she is ready". The girl stood there for about five seconds and Aileen said "So you can go. Okay." The girl left. Aileen then said to one of the women "I have to be careful with them. The other day I went into the toilet and they had started to take off her boots and undo the straps on her wheelchair. She could have fallen out".

It needs to be sensitively explained to the children why they are not allowed to push Sally in her wheelchair or they could be given supervised opportunities to do so.

#### *One-To-One With The Teacher Aide*

In the classroom, there were also factors that impinged on opportunities for the children to interact with each other. One of these factors was that Sally always worked one-to-one with the teacher aide. This was because Sally was considered the teacher aides responsibility.

Stacey then said to me "I'm going to be away tomorrow." She then turned to Sally and said "I'll talk about that later with you Sally. Grumpy Stacey is going to be away tomorrow Sally. Is that okay? It will be just you and Mr Thomas and the kids".

These comments by the teacher aide suggest that it was going to be a problem for Sally that she was going to be absent and that this was not the most desirable situation. This perceived ownership by the teacher aide is problematic because "the support person "Velcroed" to the student with disabilities, all too often forms a "bubble" of isolation. The support promised by the other person can serve mainly as a barrier to the transactions that result in more successful and effective inclusion" (Ferguson, Meyer, Jeanchild, Juniper & Zingo, 1992, p. 223).

In Sally's classroom the teacher aide offered support to the other children only as a means of punishing Sally for not complying with her instructions. In the following example, Sally would not comply with the teacher aide's instructions to point to a word, so Sally was put behind a large cardboard enclosure, a mobile timeout.

The teacher aide walked around the class marking the children's handwriting. Three minutes later the teacher aide went over to Sally and said "Are you ready to work?" "No" said Sally. "Okay. You will have to stay behind the screen" said the teacher aide. The teacher aide circled around the room again for a few minutes and then went back to Sally and repeated "Are you ready to work?" Sally again said "No", so she was left behind the screen.

Furthermore, the authors state that an important part of teaching support is that the other students in the class receive teaching support from the teacher aide (Ferguson, Meyer, Jeanchild, Juniper & Zingo, 1992, p. 224). Unfortunately, the teacher aide provided this teaching support only as a part of Sally's disciplinary process as the following example shows.

The teacher aide asks Sally what she would like to write about. The teacher aide suggests writing about her new jacket. The teacher aide says to Sally "Did Mum buy you that new jacket?" Sally says "No", the teacher aide says "Dad?", Sally again says "No", "Did grandma?", Sally replies "No" again. The teacher aide says "Okay. We will write down that Sally has got a new jacket." The teacher aide writes this down in Sally's book. The teacher aide then asks Sally to point to the word "A" Sally says "No", the teacher aide says "I will count to three "One, two" (two boys and a girl at desks behind Sally also count quietly out loud) "three" says the teacher aide. "You will have to go behind the screen and stay in at playtime".

This example shows that Sally is threatened with punishment if she does not comply with the teacher aide's instructions. I wrote down in my fieldnotes that the teacher aide counted out loud so everyone in the class could hear her. I did not know if this was for my benefit to show me that she gave Sally the chance to comply or if this was her usual behaviour. The children's response suggests that this is a common occurrence. Involving children indirectly in punishing Sally must have an effect on the children's desire to establish a relationship with her.

### *Teacher's Style and Classroom Organisation*

The teaching style of the classroom teacher was very traditional. The teacher either directed and lectured or assigned individual deskwork, there was very little group work. On the rare occasions when there was group work such as buddy reading Sally was not included. It was clear that the classroom was considered a 'work' environment by the teacher, not a place for interacting. As one of the classroom rules was "no talking", this also meant that the other children in the class would not risk responding to Sally's initiations or go over to her for fear of being reprimanded.

Sally then wheeled herself over to a boy's desk. Two boys saw her and looked at each other but did not talk or interact with her in any way. The teacher aide yelled out to Sally "Leave the boys alone as they're doing their work".

In the following example I observed a rare instance of the teacher aide mediating interactions between Sally and other children in the classroom. Unfortunately, the teacher reprimanded the children that Sally was interacting with and the interaction ended.

When Sally returned to the class from the toilet, the teacher aide was working with Tom and the other children were finishing their writing or playing on the mat. The teacher aide said "Wheel yourself over to Tracy". Tracy heard so came over to Sally and took her hands and pulled her in her wheelchair over to the mat where the toys were. Sally was smiling and making verbal noises. Tracy then got the blocks out for Sally and pulled her closer to the mat. The teacher then said to Tracy and another couple of children "Leave her alone." This was in a tone that suggested that Tracy and the other children were annoying Sally.

There needs to be more opportunities in the classroom for children to interact. This can be achieved by using teaching strategies such as co-operative learning which has been very successful in this area (Johnson and Johnson, 1981). The third theme to be discussed is Sally's social interactions and relationships with her peers.

### Interactions Observed

The third type of theme identified in the data described the interactions between Sally and her peers. There were a number of sub-themes which



characterised interactions between Sally and her peers. These included the frequency of interactions, children modelling teacher behaviour, language and rules, children without disabilities using their power for control over children with disabilities, children seeking praise and adult attention and the initiation of interactions.

#### *Invisibility of Number of Interactions*

The first characteristic of Sally's interactions with other children was that they were very few in number. This may have been because of Sally's 'invisibility' which was not only applied to Sally but also to other children with disabilities. The following example highlights Sally's apparent invisibility.

The children from the three classrooms were told by a female teacher that singing was now over and they could all now go back to their classrooms. About sixty children had to file past Sally and another girl in a wheelchair, but no one said anything to them or even acknowledged that they were there.

This was also experienced by Meyer (1996) who looked at how children view their peers who have disabilities. She found that often the children with disabilities were ignored, were invisible or were considered to be one of "them" rather than one of "us". Meyer termed this "ghosts and guests". Another characteristic of Sally's interactions and relationships was the controlling nature of the children without disabilities.

#### *Controlling Relationships*

The interactions and relationships that I observed between Sally and her peers had very distinctive features. Tracy was the only child in Sally's class who had a long-standing involved relationship with Sally whom she considered to be a friend. At one stage I asked Tracy, "Do you like playing with Sally?" "Yes, cause I'm her friend" she replied.

The interactions between Tracy and Sally often involved Tracy modelling teacher and teacher aide behaviour, language and rules. Tracy would then seek praise and teacher or adult attention when she interacted with Sally. Most of these interactions between Sally and Tracy occurred in the playground. The following example shows how Tracy modelled teacher behaviour and language.

Tracy comes over to Sally and says "Come on. Yes. Get those hands on those wheels. Hurry up, now. Hurry up". Another girl says to Tracy "She has to push herself, you know". Tracy says to me "Come on Rebecca, if you're going to follow us". I get up and follow them. Tracy says to Sally "Good girl, turn", Sally says "No". Tracy then turns to some boys with her hands on her hips and says "No swinging on the branches." Tracy had previously put Sally's keys in her backpack which is on the back of her wheelchair. She says to Sally "I'm going to get those keys out cause you're trying. Come on I know you can do it. Keep trying". Tracy gets the keys and waves them in front of Sally about two feet away and says "Look what I've got".

The language she used is not typical of that used in play interactions between children aged seven and eight and does not signify an equal reciprocal relationship. These observations are similar to Meyer's (1996) observations where children would typically push the wheelchair or act like a teacher. These interactions also reflect how a child without disabilities uses her power to control children with disabilities. They reflect the hierarchy of power within the school where the teachers have power or authority over the teacher aides, the teacher aides and the children without disabilities over the children with disabilities. Meyer suggests that these may be low status children who are not getting valued anywhere else. The children in her study said they liked the teacher attention which may account for why they competed for ownership as they were essentially competing for teacher attention. The children modelled the teacher helping, so they helped because the teacher valued it.

I did not observe any interactions where Sally was an equal participant in games or other forms of play. However, from a distance an adult might observe that Sally is playing with other children but closer investigation reveals something different. In the following example during lunchtime Sally was wheeled over to a group of five children in wheelchairs sitting under a tree.

One of the boys (he looked about ten) went up to Sally and said "Do you want to throw ball?" There was no immediate response from Sally so the boy gave Sally the ball and said "Sally throw the ball." Sally threw the ball on to the ground. The boy said "Do you want to do it again?", again there was no immediate response from Sally. The boy gave Sally the ball and said "Do you want to throw it? Come on Sally. Throw it to

me". Sally said "No". The boy said "Do you want to throw it to Ben?" (another boy in a wheelchair). Sally again replied "No", and the boy said "Who are you going to throw it to?" There was no response from Sally, so the boy went and talked to another child in a wheelchair.

It seems that Sally is resisting participating in a game that she does not want to play. In the following example a child without disabilities is given or takes power and control over a child with a disability who is in a wheelchair.

I looked out of the dining room window and saw Martin being pushed by Tracy. Martin attempted to put his brakes on using his hands. His face was all crumpled up as though he was going to cry and he was pointing in the opposite direction. Tracy said to him "No, we're going this way" and continued to wheel him in the opposite direction to where he wanted to go. Martin started to cry.

This example highlights the lack of power the children with disabilities have over their own actions and bodies. The following example highlights the link between Sally having to push herself to follow the rules and Tracy obtaining adult attention and praise by ensuring that these rules are adhered to. This example also shows my lack of authority in Tracy's eyes.

Tracy then came over to Sally and I said to her "Lunch time is nearly finished." She said to me "Can you please take your hands off and let Sally wheel herself" (as she said this she tried to push the chair out of my reach and prise my fingers off the wheelchair). I replied "It's okay", she said "No. Sally has to push herself." I asked Tracy "Why does Sally have to push herself?" Tracy replied "Sally has to push herself so Stacey will get really happy." She then turned to Sally and said "Come on, Sally. Keep pushing and Stacey will be happy." Tracy then took Sally's keys off her and put them in her backpack which is attached to the back of the wheelchair.

Many of the interactions that I observed between Sally and other children were initiated by Sally. This contradicted a comment made by the head teacher of the unit that "the other kids have to initiate". The largest proportion of these interactions were not terminated by the children but by adults and the rules and routine of the school.

Sally wheeled her chair backwards into Melissa. Melissa replied "Sally!!!", in an annoyed disciplinary tone. Sally wheeled herself away and the girl continued her printing. Simon who was sitting in a desk by himself facing the wall said "Sally. Go to your desk." Sally wheeled herself back to her corner where I was sitting and showed me her work in an exercise book by turning the pages.

Sally pushed herself beside Julie's desk, Julie said "Hello. Where should you be Sally?" There did not seem to be any response from Sally. Julie continued with her story writing while Sally sat in her wheelchair and looked around the room.

Unfortunately because of the climate and rules of the classroom this led to children reprimanding and disciplining Sally for leaving her corner of the classroom. They modelled this behaviour from the teacher and the teacher aide and were encouraged to do this by the teacher and the teacher aide.

### Conclusion

For there to be an improvement in Sally's social relationships with her peers there is the need for major changes in her classroom and in the wider school context. All school personnel including the teacher aide need to be made aware of the importance of friendship and how it can best be facilitated. There needs to be increased supervision and monitoring of children's social relationships, instead of teachers just taking on a disciplinary role when on duty in the playground.

## CHAPTER SIX

### Case Study Three

#### Methods

##### Participants and Setting

The participants in this study were selected during case study one under the paradigm of diagnosis and intervention on the child with the disability. For this and the preceding case study, there was a shift in methodology but for moral and ethical reasons I continued with the children that I had recruited under the guise of the original study. I was no longer interested in diagnosis and intervention on the child with the disability but on the social interactions and relationships that existed between the child and their peers. Whilst somewhat constrained by the original framework, the change of methodology meant I could examine the context of these interactions and relationships and determine who and what was helping and hindering the development of friendships in the setting.

Sarah was aged eight years and one month when I first met her at the start of the study. I established a closer relationship with Sarah and her family during and after data collection because I took on a paid position tutoring Sarah at home during weekends and the school holidays. Sarah has an undiagnosed developmental disability with Dyspraxia and she is fully mobile but has uncoordinated motor skills. Although Sarah has limited verbal language her vocabulary is continually increasing and she uses two-and three-word phrases consisting of names, objects and actions. Compared to the other children in her class Sarah is tall for her age, she has short brown hair and usually wears the optional school uniform. Sarah has been attending school full-time since the age of five and a half years and is the same age as the other children in her class. Her older sister also attends the school. Sarah attends a specialised programme for children with motor disorders after school on a Tuesday and Thursday. Sarah takes medication for epilepsy.

This state primary school is located in a middle-class neighbourhood in a major city in New Zealand. Approximately three hundred children attend the school, from year one through to year six. Sarah's female classroom teacher has over twenty-five years' teaching experience and is a head teacher at the school. Sarah's year four class has twenty-nine children in it, eleven

boys and seventeen girls. All the children attend school full-time. During the course of this study, Sarah had three teacher aides.

Other people mentioned in the study are Leanne who is another child at the school and has a disability. She is the same age as Sarah but is in a different class. Mrs James is Sarah's present teacher aide and Mrs Smith is one of Sarah's previous teacher aides. Mr King is the "Bible in Schools" teacher. Angela, Tracy, Lisa, Andrew, Tracey, Tessa, Christy, Amanda, Karen, Louise and Hazel are all children in Sarah's class.

### Data Collection

Participant observations were conducted from the end of January 1996 to mid-November 1996, although not on a continuous basis (see Appendix M). Visits in the classroom lasted from one to two hours and included times when Sarah was both present and absent. Observations were conducted in the classroom, in the playground, in an IEP meeting, during school assembly and on the school camp. I attempted to write up my fieldnotes as soon as possible after leaving the field so that I could get down as much detail as possible. I wrote notes in the setting when I felt it was appropriate or when other people in the setting were also writing, although this was not always easily determined as the following example shows.

While in the pine forest the children were writing on their worksheets and in their camp books so I thought I would take some notes because I would not stand out. Leanne's teacher aide said to me "Are you analysing the pine cones or our behaviour?" She then laughed.

Qualitative interviews vary in the degree to which they are structured (Bogdan and Biklen, 1992, p. 97). In this case study, informal conversations during participant observations with students, teachers and teacher aides and interviews with Sarah's mother contributed to the data collected. The initial interview with Sarah's mother was very flexible and was concerned with her perspectives on Sarah's social relationships and friendships and her experiences with the school. A second interview conducted two thirds of the way through data collection focused on what I had observed in the school setting and included a discussion about the possibility of setting up a 'Circle of Friends' for Sarah. I did not use a tape recorder in either of the interviews because I wanted them to be informal so I could establish rapport, therefore both interviews were written up as fieldnotes. As data collection and analysis proceeded, later observations focused more on particular topics and issues

concerning social interactions and social relationships generated from earlier observations and informal interviews. In total approximately 120 pages of fieldnotes were generated, based on about 50 hours in the setting.

### Participant Observations

Before entering the setting I had read about the dilemma of choosing how to participate in the school setting. Bogdan and Biklen (1992) state that the researcher needs to decide if they are going to act like the teacher, the teacher aide or if they are going to participate in what the children are doing (p. 88). I decided that I did not want to act like an authority figure such as the teacher or the teacher aide. I intentionally dressed casually when at the school so I would not be identified as such. I wanted to participate as much as I could within the constraints of the setting but was aware that because I am an adult it was unrealistic to expect that I could be a full participant in the classroom. I kept in mind that how I acted had an influence on how the children, the teacher and the teacher aide defined me. Yet once in the field I found it was the teachers, the teacher aide and the children who decided my role - it was through interaction with them that I discovered the participation I could have. The options of roles the children chose for me were taken from their experiences of other adults in the school setting.

My role as the observer in this study was best described as moderate to active participation, depending on the setting. For example, I participated more on the class camp than I did in the classroom.

### My Role/How Others Perceived Me

I had contact with many different people in the school setting. They all constructed my role in different ways. On some occasions I tried to resist the role they gave me but on other occasions I had no choice but to accept the way they positioned me.

#### *Sarah*

The following instance shows how Sarah perceives my role which is to follow her. It also shows that Sarah has some authority over me.

Leanne runs over to the bark adventure playground. Sarah starts to go over to the playground, turns around and signals to me and says "Come here". I say "In a minute Sarah". Tracy who is sitting down still finishing her lunch says "She'll be there in a minute Sarah".

Sarah is still indicating for me to follow so I say "Ok Sarah I'm coming". I get up and walk the ten or so metres to the playground.

### *The Other Children*

I wanted to show that I was not focusing on Sarah but also the other children in the class. This was intentional because otherwise I would have bought into the deficit model which I was trying to avoid. This was difficult to avoid at times however because of the ways the teacher aide positioned me.

As I was leaving the classroom a number of children said "Goodbye Rebecca". Mrs James who was now at Sarah's desk said "Sarah, say goodbye to Rebecca".

I also built up a relationship and established rapport with the children in Sarah's classroom, especially with the girls. I made a conscious effort to arrive at school early knowing that I could have some time with the other children before Sarah arrived soon after 9am.

I arrived at school at 8.35am. I went into the classroom and put my bag in the office between the classroom and the resource room (where Sarah has her one-to-one time with the teacher aide). I went back into the classroom and talked to many of the children about different things. Lisa came and gave me a flower to put on my jacket, Angela tried to sit on my knee, and we talked about the upcoming camp. There were many parents talking to the teacher about the class camp. At 8.50am the teacher said to me "How are you today Rebecca? I haven't had a chance to say hello". I replied that I was fine.

In my fieldnotes I wrote down "The children seem to be getting used to me. They seem quite comfortable doing silly things in front of me". I also made an effort not to monitor the children's behaviour or take on the role of disciplining the children, even when they asked me to do so as in the second example. The teacher gave me space to be accepted by the children and encouraged interaction between us as shown in the following example.

The teacher asked me if I could put Andrew's poster of a dinosaur on to the wall. She said to Andrew "Ask Rebecca if she can help you." I got a chair and told Andrew "You can pass me the drawing pins." I stood up on the chair and pinned the poster up. The teacher said "Thanks, Rebecca".



Tracey called me over to help her sellotape two cupboards shut. While I was doing that Lisa was asking me how to do long division, then another girl came over to me and asked me to go outside because Tessa was crying because Karen had punched her in the stomach. I went outside and over to Tessa. I said to her "Maybe you'd like to go inside and sit down for a while." She went inside the classroom and I stayed outside because Christy had come up to me with a basketball and wanted to shoot some baskets.

At times the children would put me in the role of the teacher and would try to get me to take on a disciplinary role which I intentionally resisted. I also actively resisted making Sarah the focus of my attention as the following example shows.

Hazel came over to me from the maypole which Sarah had spent a lot of time on and said "They won't let Sarah have a turn". I got up and went over, I didn't go over and say "Let Sarah have a turn". Instead I said "Right, I'll time you all for two minutes so everyone can have a turn, then we'll swap". They were happy with this solution.

#### *Sarah's Previous Teacher Aide*

Mrs Smith was Sarah's teacher aide until May of 1996. The teacher aide saw me as an opportunity to voice her position and experience as a teacher aide and describe what it is like. She saw me as some one who may have been able to make a difference.

Leanne's teacher aide came over and sat beside me. We started talking about teacher aides. She said to me "We have no respect in the school. We are the general dogsbodies. We do everything from making morning tea to doing the photocopying because the teachers aren't allowed to touch the photocopier. It's quite interesting because there are three teacher aides in the school, both Mrs James and I are here and the other teacher aide is in Australia. I said to the secretary the other day that she would have to do our jobs and she said No way".

Because the teacher aides in the school are undervalued and are at the bottom of the hierarchy in the school their coping strategy is to get support from each other, which is why they often take Sarah and Leanne out of their respective classrooms to work together.

### *Mainstream Support Person*

I went to Sarah's IEP meeting because Sarah's mother wanted me to talk about Sarah's social relationships and offer suggestions on how to improve them. Unfortunately, my ideas were totally disregarded and I was rendered invisible. At the end of the meeting when I obtained a copy of the revised IEP form I saw that my name was omitted from the people present at the meeting.

The mainstream support person asked me who I was and what I do  
"Are you Sarah's helper?".

I wondered what the term "Sarah's helper" meant. Did it mean that I have even lower status than the teacher aide?

I said "Good question. What *do* I do. I'm Rebecca Philips I'm doing research on social interactions and social relationships and Sarah is one of the children in my study". Sarah's mother then said "Rebecca also works with Sarah at home."

The atmosphere did not seem as relaxed and as informal as I expected. I could tell straight away who was going to be running the show and who was considered the expert - the mainstream support person.

### *Teacher Aide*

The teacher aide was threatened by a) her own lack of confidence, b) the knowledge of others, and c) others interacting with Sarah. There was a contradiction in the way the teacher aide interacted with and perceived me. She was threatened by me and did not want me to take over, although because she was not confident, she also needed my support and knowledge to justify and confirm that she was doing a good job.

The teacher aide asked me "How long do you work with Sarah at home?". I replied "Usually for an hour, sometimes shorter if she won't concentrate". "Thank goodness" she said "When I first started Sarah's speech and language therapist came for three weeks and I felt awful because Sarah wouldn't do anything". I said "Often when I work with Sarah at home she wants Jack to work with us as well". She said "Sarah often wants Leanne to work with her".

I perceived that she was not confident so I adapted my behaviour so as not to challenge her. I found it difficult and uncomfortable at times because the teacher aide would ask me questions to justify her actions. In the following example when Sarah had to put toothpaste lids on five dots, the teacher aide asked her to use both red and white lids.

For number five, she asked Sarah to mix the colours. Sarah put down three red lids, the teacher aide said to me in front of Sarah "I think I'm asking a bit much, don't you?". I did not reply and continued to watch Sarah. Sarah then put on two white lids, she said to Sarah "I didn't think you'd do that".

When the teacher aide became more threatened by both me and a parent who was on camp, she became increasingly possessive of Sarah and tried to discredit the parent.

Sarah's teacher aide came over and sat beside me and another woman. They started talking about Tracy's mother whom we could see supervising the sack game where Sarah was still playing. The teacher aide said to this woman "I sometimes wonder if she is an alcoholic. Sometimes she comes into class and I'm sure she smells of alcohol, but who am I to judge what other people do". She then turned to me and said "I went over before and she told me off, and said that she is quite capable of keeping an eye on Sarah. I told her it's my job, it's what I get paid for, and it's my responsibility. I get into trouble if anything happens".

The teacher aide saw herself as having authority over me. It was not appreciated when I challenged and resisted the role that I had been given by her. In the following example the children and the teacher aide were standing with each foot on a wooden plank. The aim was for each child to lift their feet at the same time so they could walk.

The children would yell out "One two three left, one two three right". The whole group found this very difficult not just Sarah but Sarah's teacher aide said to me in front of the children "Sarah can't lift her left leg". I replied "No. She's doing it" and she said "No Sarah cannot lift her left leg".

This really annoyed me because the teacher aide was also on the plank and Sarah was behind her so she could not physically see if Sarah was lifting her foot or not. After her second comment I held my tongue. A few minutes later when a boy said "If Sarah got off we could do it" the teacher aide became very angry and said "it's not nice to blame Sarah", which was the behaviour she had previously modelled. The following is another example of the teacher aide's perceived authority over me.

The children were told the rules of the camp by the camp manager and were then told to take their bags to their bunkrooms. These groups had been decided by the teacher before the camp - I was with the teacher aide, Sarah and seven other girls. The children in our bunkroom then decided who was going to sleep in each bunk but the teacher aide had a lot of influence on this. I chose a bunk and put my gear on it, although the teacher aide *suggested* that I should have the bunk by the door instead in case I needed to get up during the night. The teacher aide also decided that Sarah's bunk was to be beside hers.

This seemed all very controlling and unnecessary. It also highlights that the teacher aide thought she had control and authority not only over Sarah but also over me.

#### *School Camp*

The teacher aide and I started talking about the class camp where I am going as a helper. The teacher came over and the teacher aide said to her "Do you remember Rebecca is going on camp?" The teacher replied "Yes", she then turned to me and said "You don't mind administering the medication?" (the medication has to be inserted into Sarah's anal passage if she has a seizure). I said "No I don't mind". The teacher aide then said to me "It's just in case I'm not there".

I could not understand the justification for my needing to go on camp which I was told was in case Sarah needed medication and the teacher aide was not present. The other child with a disability attending the camp did not need any other adults present and her teacher aide is a registered nurse so could have administered medication. I was not given access to or information about administering the medication so it appeared that there was some other reason for my presence. This dialogue was interesting because the teacher was giving me some responsibility, which the teacher aide immediately

withdrew somewhat and then clarified my position which was to be subordinate to her.

A mother who was also going on the camp was in the classroom.

The teacher introduced me to her "This is Sarah's helper, Rebecca".

Could this be one of the parents the teacher had been talking about who thought Sarah took up too much of the teacher's time? This was an indication to me of what my expected role was to be on camp. I did however want to resist this because I did not want to be seen in this way and I did not want to be Sarah's shadow as she already has one of those in the teacher aide.

It seemed as if my role was to reassure parents that Sarah did not take up too much of the teacher's time rather than to administer medication as I had been told.

The teacher then gave out name tags to all the children and the adult helpers. The children had their first name and surname written on their tags and the parents had their surname and title written on their tags. My name tag however had my first name only.

Was this another indication of my status and role? This became a conversation starter and meant a lot of the adults asked me what I was doing on camp because I was obviously not a teacher, a teacher aide or parent helper.

### Data Analysis

The data from the classroom, school camp, IEP meeting and playground observations and the interviews were analysed in the typical qualitative tradition. Although analysis is inductive and ongoing throughout the study it was divided roughly into two stages. After completing six observations and becoming more familiar with the setting, I read through my fieldnotes and wrote myself memos about emerging themes and ideas, and possible relationships. This was my first attempt at looking for underlying patterns and conceptual categories that made sense out of Sarah's social relationships with the other children in her class and in the school (Merriam, 1988, p. 60).

The second and final stage of analysis occurred once data collection was completed. I broke up the text into small paragraphs and chunked the data into the following Bogdan and Biklen (1992) family codes, setting and context

codes, definition of the situation codes, perspectives held by the subjects codes, subject's ways of thinking about people and objects codes, process codes, activity codes, event codes, strategy codes, relationship and social structure codes and methods codes. I then sorted through the data and looked for regularities, patterns and topics and wrote down on a large sheet of paper words and phrases that represented these patterns and topics (p. 166). When all the data had been coded, I ended up with a list of 34 coding categories which were not predetermined but emerged from the data. These included codes such as "parents must be grateful", "ownership of disability", "teacher aide status", and "resistance to exclusion" (see Appendix N). I then assigned a number to each coding category and assigned numbers to each piece of data corresponding to the coding category that it fitted under. Some pieces of data went under more than one coding category. I then worked with each code in turn and looked across codes to see if any themes emerged from the data. I found that as I did this, the codes began to interconnect and overlap. From this analysis three main themes emerged, so the data was re-examined and interpreted according to these three themes.

### Findings

In the process of participant observations and informal discussions about relationships and friendships, three major sets of themes emerged. The first theme is the school role - the school does not see itself as having ownership of or responsibility for disability. The second theme is the limited opportunities to interact - the influence of the teacher aide and Sarah being pulled-out of the classroom to work in the resource room. The third set of themes are the characteristics of the interactions and relationships between Sarah and her peers at school.

### School Role

The first theme is the role of the school and its lack of responsibility for or ownership of disability. Research has consistently shown that for children with disabilities to be seen as valued members of the class, the teacher has to take responsibility for the child rather than passing that responsibility on to the teacher aide (Schnorr, 1990; Giangreco, Dennis, Cloninger, Edelman & Schattman, 1993). A bigger picture would suggest that the school needs to take responsibility for the children with disabilities to be seen as valued members of the school rather than passing this responsibility on to the outside experts and the teacher aide. By giving the teacher aide all the responsibility, the school can lay the blame with her if things go wrong.

If a school lacks the necessary resources within its boundaries to cope with difference, then one avenue open to it is to turn to outside expert services for support. If this support is inadequate (which appears to be the situation for this school) then the school must adopt coping strategies. Attempts by the school in the past to address this have failed. A buddy system was put in place which was unsuccessful in promoting friendship. Research has consistently shown that buddy systems merely produce teacher and student type relationships rather than true friendships (Biklen, Ford & Ferguson, 1989; Kishi & Meyer, 1994). As a result problems compounded and parents of the children without disabilities complained.

The teacher said there have been problems with parents in the past. There was the feeling among a few parents that Sarah took up too much of the teacher's and class time. Some parents this year did not want their children to be in the same class as Sarah. She said no parents have said anything directly to her, but that doesn't mean they weren't saying it to others.

The teacher also said "Unfortunately the kids that volunteer to help Sarah are the ones whose parents aren't happy." She then went on to say that "These children may have been overused in the past, especially in the playground".

As a result, the coping strategy the school has adopted is to highlight the differences between the children with and without disabilities. Disability is perceived as an insurmountable problem which they do not know how to deal with and so the responsibility for it is avoided and left to the person in the school with the lowest status (the teacher aide) and the outside professionals. Internally the school avoids action by exclusion of the child with the disability and justifies this by saying that parents will complain. It is easier for Sarah to be excluded and put in the resource room than adapting the classroom and the curriculum and confronting parents. That people with disabilities are less valuable human beings "may be applied to schools that justify discrimination against students with disabilities on the basis of lack of 'resources' or the 'unfairness' of taking teacher attention away from 'others' in the class. In defining some students as 'different'... disability is constructed as a devalued position and created as the experience of oppression within disablist settings" (Ballard, 1996, p. 41).

In this case study, the school's avoidance of action was demonstrated when under the framework of my initial approach I attempted to put a 'Circle of Friends' intervention into place for Sarah.

I told the teacher that I had been talking to Sarah's mother yesterday about 'Circle of Friends' and the possibility of setting one up for Sarah before camp. She said "That is fine I have no problem with that." She went on to say that they had done a similar thing earlier on in the year but without the kids, and they had set up a buddy system. She said that Sarah would often go off and not take part in things. I said "That's why it's good to get the kids involved so they are aware of these sorts of things." I then said "I could talk to the teacher aide, get her in on it, so she would know the process and could use it again." The teacher agreed.

I asked the teacher if I would need consent from the children's parents. She said she hadn't thought about that. She asked me "What is exactly involved?". I said that "If I could say have twenty minutes of class time and I could get each of the kids to do their own friendship circle." The teacher asked me "Do you want to do that today?" I replied "Oh no, I wanted to talk to you first." I said "I would then ask for volunteers to be in Sarah's circle of friends. We would then meet about once a week to discuss issues that come up." The teacher said she would "rather not get parents involved because then the principal would need to be involved and I don't think he would be very keen". The teacher said if it wasn't "done too deep" maybe the parents wouldn't need to be involved.

I challenged and put pressure on the school's 'no action' and found that the school was not prepared to be involved. It was fine for me to do a twenty minute talk as it was not too challenging but when I wanted to do something more extensive they did not want to take part. Maybe I was perceived as a student who was going to be walking away after the study was finished and it was therefore easier and safer for them to maintain the status quo.

Whilst the school failed to take responsibility for Sarah's needs, the outside professionals also failed to provide adequate support to the school. For friendship to be encouraged there is a need for the outside experts and professionals to be aware of the importance of friendship and to possess the necessary skills to support the teacher and the teacher aide in facilitating this.



During the IEP meeting, the discussion moved to Sarah attending intermediate in two years. Sarah's mother said the school should be broken in because another child from South School was attending before Sarah. The teacher said "Sarah could be in the class the whole time if it wasn't for her own learning".

The whole tone of the meeting seemed to be that the parent should be grateful that the school had allowed this child to attend the school and that she was allowed to remain because "she is a nice child and you wouldn't even know she was in the class" (teacher's words).

Sarah's mother and the teacher left the meeting at 2.25pm. Sarah's mother asked me to give her a ring later, I said sure. After Sarah's mother and the teacher had gone, the teacher aide appeared to open up and be a bit more honest. She said that she "often gets really frustrated and bored doing the same thing over and over again." The mainstream support person said "Do you use the toy library?" The teacher aide said "Occasionally, maybe once or twice a week." The teacher aide then said she doesn't know what to do when Sarah goes on and on about something. "She gets something in her head and won't let it go and some days I just feel like telling her to shut up". The mainstream support person's answer was to tell the teacher aide to ignore her. She said that "when you answer her you are reinforcing her."

The mainstream support person said that Sarah compared to some of the children she has worked with is really easy. She then discussed a child with autism and how he rips off his clothes. "When things get bad you should think that you are lucky you have Sarah and not Tracey. Tracey can be really aggressive. She has autism and is a very attractive girl. She is really hard to deal with. Michelle (her teacher aide) is going to need release time soon." The teacher aide said "I've told our principal I won't work with her." The teacher aide then said "Yes I suppose you have to take the good with the bad."

The mainstream support person did not offer the teacher aide any strategies or support for working with Sarah. It seemed that she was just saying that she was the one with all the knowledge and was not prepared to share it with the teacher aide. "Many professionals uncritically assume that the narrowly focused categorical and specialized approach to clinical practice that they were

taught is actually appropriate and beneficial for the people they serve. This frequently takes the form of "professional preciousness"- the claim that people with particular disabilities can be properly served only by a duly trained and credentialed professional. The implication is that professional training communicates some specialized knowledge that "un-initiates" - parents, paraprofessionals, and the like - cannot utilize properly" (Bogdan and Knoll, 1995, p. 705).

After the IEP meeting I phoned Sarah's mother as she requested. I asked her "Did you feel that you were listened to?". Sarah's mother replied "No, not really. She didn't listen to what I had to say. Last time I went I got the feeling that I shouldn't be there and I'm the mother".

Because responsibility is left with the outside professionals and 'experts' by the school, it means it is up to them to decide that friendship is important. That is why I was concerned with the attitude of the mainstream support person at Sarah's IEP meeting.

The mainstream support person asked if there was anything else that anyone wanted to bring up. Sarah's mother suggested that I might have something to say about social objectives. I said that I had noticed that some of the children were really good at teaching Sarah the rules of the classroom, which was good because it was probably more effective and it meant the teacher or teacher aide did not have to do it all the time. But on the other hand it isn't good because it meant that these children were acting like teachers or mothers and that wasn't an equal social relationship. The teacher said "Yes, that's true. Karen is like that." I said "We have been discussing the possibility of setting up a 'Circle of Friends' for Sarah".

I then said "It was interesting to see kids playing with Sarah on camp that I had not seen playing with her at school". The teacher aide then said "Sarah has got lots of friends". I continued and said "This may have been because there was lots of free time and lots of activities like standing on the beam. They had games that all children could participate in because they did not have a lot of complex rules".

The mainstream support person asked the teacher and the teacher aide if there were any games the children could play in the class together in the classroom. The teacher aide said she has got a game of memory that

the children could play. The teacher then said that because it was nearing the end of the year the class was going to be more flexible so there was more opportunity for that sort of thing. The teacher aide continued and turned it into a discussion of the academic side of the game of memory so the thread and focus on friendship was lost.

In my fieldnotes I wrote "How frustrating! None of you, apart from Sarah's mother, are taking this very seriously, is it because friendship is not considered important? Is it something you slot in if you have free time?" I felt social relationships and friendship were regarded as unimportant and this was confirmed when nothing was added to Sarah's IEP about social objectives.

Of particular interest to me was the addition under oral language on Sarah's revised IEP which read "Sarah is much more confident with her speech and has become eager to interact with friends". I interpreted this as an example of the mainstream support person's lack of knowledge about friendship. She has assumed that if children are observed to be interacting it means that they are friends. It also appeared that by writing this there are no problems with Sarah's social relationships so my input was not necessary. After everyone else had left the IEP meeting, I had the chance to talk to the mainstream support person and find out more about her perspective on friendship. It went as follows:

When I returned from the office where I photocopied Sarah's revised IEP, I asked the mainstream support person if she knew what 'Circle of Friends' was. She said "No I don't". I explained what it was. I said "You start by getting each person in the room to do their own circle (I explained what each circle represented) then you compare these circles with someone with a disability and you generally find that they have their family and lots of paid workers but not many close friends". The mainstream support person said "Yes. They are often the loners. That is why our special school is really great. The kids keep with their like peers and because they are similar they develop strong friendships".

It seems as if she is advocating that friendships will not be established in regular schools, but can be achieved only in special schools. I found this difficult to accept because she is the only person who can advocate for the importance of friendship and provide support to ensure it is achieved.

There seems to be the assumption by many people in the school that children with disabilities will not make friends and that this gets progressively worse as they get older. Instead of facilitating friendships between Sarah and all children, Sarah is encouraged to interact with Leanne who is the same age as Sarah and who has a disability. The following two dialogues occurred on camp.

The teacher aide was talking to one of the mothers about Leanne and her sister. Leanne's sister attended a special school but was now going to be mainstreamed into a regular school. They were saying it was a shame to be mainstreamed at her age because at her age she will be alienated. They talked as though it was inevitable and expected, although sad. The teacher aide then looked over at Sarah and Leanne playing and said "It makes you wonder what will become of them".

The children went into the pine forest to do some orienteering. Sarah and Leanne and their teacher aides and I went for a walk through the forest because the "girls are tired". At one stage we met up with the two classroom teachers. Sarah's teacher made the comment that "They're lucky they've got each other".

This seems to be a contradiction with Sarah's parent's views. Sarah's mother saw friendship as very important, more important than academic objectives.

I said to Sarah's mother that in the IEP meeting I got the impression that friendship was not considered to be very important. I said "Maybe I am on a different wave length but I think that it is one of the most important things". Sarah's mother agreed with me and said "It certainly is for these kids. They are not going to achieve academically. I mean I am not going to have to save for Sarah to go to University. She is not going to need a student loan, so friendship is really important".

There is a lack of education, there is no adequate support from the outside professionals and the school does not take responsibility for the children with disabilities. "Parents have long recognised that identifying disability as a "personal trouble" is how the education system denies its responsibility for their child" (Ballard, 1993, p. 94). The school needs to take responsibility and be pro-active in getting the support that is needed. There is a lack of education, necessary skills, knowledge and awareness of how to facilitate and

improve social relationships. The following theme to be discussed examines the opportunities that Sarah has to interact with her peers.

#### Interactions Limited by Opportunities

Sarah's opportunities to interact with other children were limited by her being pulled-out of the classroom and put into the resource room to work on a one-to-one basis with the teacher aide. Her opportunities were further limited by the direct and indirect influence of the teacher aide.

#### Pull-Out in Resource Room

Sarah spent the first two hours of each school day in the resource room, which is next door to the classroom, working with the teacher aide. This limited Sarah's opportunities to interact with other children in the classroom. Sarah resisted this exclusion from the classroom - she demonstrated a desire to be included. In the following example we were sitting in a resource room when a group of girls came in to practise a play. The teacher aide told them to go to the empty art room next door.

Sarah is pointing to the door which leads to the art room where the small group of girls are. The teacher aide said to me "Since the start of this term, Sarah doesn't like being out of the class. She thinks she is missing out".

The teacher aide does not interpret this as Sarah wanting to be included but as Sarah wanting to get out of doing academic work. It also highlights that academic work is considered to be more important than social interaction. The following example again highlights Sarah's desire to be included. I was in the resource room with Sarah and the teacher aide.

At one stage Sarah pointed to the door which led to the classroom, she said "Back" Mrs James said "No, they're doing their maths, you're doing yours".

The teacher aide interpreted Sarah's comment as a desire to go back to the classroom. However, because the teacher perceives the work done in the resource room as more important than that done in the classroom it was not possible for Sarah to go back into the classroom. "Instructional isolation ... in resource rooms, a primary mechanism for delivering specialized instruction to students with mild learning handicaps, is much more similar to individual tutoring models than to classroom teaching. This kind of

individualised instruction is motivated more by a desire for control, and belief in principles of scientific management, than by attempts to promote the development of active involvement and autonomy" (Ferguson, 1987, p. 101). It is ironic that "in order to achieve the educational preparation to live fully integrated adult lives, students must increasingly be re-segregated from their school-aged peers" (Ferguson, 1987, p. 84).

#### *Influence of the Teacher Aide*

The teacher aide had a considerable influence on the opportunities that Sarah and the other children had to interact. The teacher aide modelled behaviour that was not conducive to encouraging children to interact and develop relationships with Sarah. This can be seen through the following mechanisms - the teacher aide shadowing and gate-keeping, the language the teacher aide used to speak about Sarah, the teacher aide's perception of her own status, and the issue of responsibility for Sarah.

#### *Shadowing and Gate-Keeping by the Teacher Aide*

The teacher aide says to Sarah "I think we will do some writing". Sarah points to the mat. The teacher aide says "Do you want to play with the girls?". Sarah and the teacher aide sit down by Louise but they don't talk to each other. The teacher aide gets Sarah to put together a box (parallel play). The teacher comes over to the mat and says "What has been made here?" A boy replies "Sarah has made a box".

This example shows shadowing and gate-keeping by the teacher aide. It means that the teacher aide is always present and attached to Sarah, which gives the impression to the children that Sarah already has a 'friend'. It results in the children not talking and interacting directly with Sarah but through the teacher aide. This shadowing and gate-keeping also occurred in other settings, notably on camp as the following example shows.

In the early afternoon the children changed into their swimming costumes to have a turn on the water slide. The children clapped and laughed if any of them went really fast and went off the end of the slide into the sand at the end. When Sarah had her turn she went really fast and all the children clapped and cheered. As soon as she had had her turn the teacher aide was there with her towel and took her to have a shower.

In this situation unfortunately, it meant that Sarah was not able to fully participate in the activity because the teacher aide took her away. The other children remained and had more turns on the water slide. This example also shows that when the other children are given the opportunity, they include Sarah. The following example shows the teacher aide's possessiveness of Sarah which is linked to gate-keeping and shadowing. This also took place on camp.

The manager got out a horizontal bungy for the children to have a go at. Sarah's teacher aide went up to Sarah and asked her if she was going to have a go at the bungy. After all the children had had a turn on the bungy (about 9.15pm) they had some supper. Sarah's teacher aide came up to me and said "I asked Sarah if she wanted to go and get her jarmies on and go to bed. She said "No. Stay". She asked her this when all the children were sitting on the mat listening to the manager tell a story.

There is always the assumption that Sarah will not take part and be included in all activities. This example again shows the teacher aide trying to exclude Sarah. Sarah responds by resisting this exclusion and voices her desire to be included. The teacher aide emphasises and creates differences between Sarah and the other children, This not only limits opportunities to develop friendships but also lessens Sarah's attraction to other children. This possessiveness of Sarah occurred in many different contexts as the following example shows.

The buses arrived at 2.15pm to take us back to school. Sarah's teacher aide and I got on the bus first. I took a seat and the teacher aide said "Save these seats for Sarah and me while I go and get Sarah".

This again shows the teacher aide gate-keeping and shadowing Sarah, thereby limiting Sarah's opportunities to interact with other children. This example also shows the teacher aide's authority over me where I had no option but to comply.

#### *Teacher Aide Status*

The teacher aide's perception of her status is reflected through Sarah's behaviour and academic achievement. The teacher aide has very low expectations for Sarah. She will not let her take risks with her work, and she is never allowed to be seen to fail. Therefore, the work she does is not age-

appropriate. In the following two examples Sarah tries to tell the teacher aide that she is capable of doing harder work, unfortunately she is not listened to. The following instance was in the resource room.

The teacher aide then got out the number six card and Sarah said "Six" correctly. The teacher aide said "You did that out of the blue without me even watching". Sarah reached toward the bag that held the rest of the numbers to ten but the teacher aide said "No more. That's enough. It's too much now".

In my fieldnotes I wrote "Is this about expectations? Why won't the teacher aide allow Sarah to try harder things?" Is it because she is trying to impress me with what Sarah 'can' do and does not want me to see her 'fail'. I also realised the work I do with Sarah at home is a lot more difficult than the teacher aide does with her. For example we write sentences on the computer and I make sure she knows about capitals at the start of sentences and for names, and that she knows a fullstop goes at the end of a sentence. This second example of low expectations occurred in the classroom.

The teacher had written the camp menu on the blackboard. The teacher aide writes the first word " Menu" into Sarah's book. She calls Sarah over and says "Sarah, trace the word and then write the word underneath". Sarah pointed to the board, the teacher aide replied "No Sarah, just one word". Sarah went to her desk and did as she was told.

The teacher aide interpreted this as Sarah wanting to copy the whole menu off the blackboard. Why are the teacher aide's expectations of Sarah so low? The following is another example of the teacher aide's low expectations for Sarah and also shows the language the teacher aide uses when speaking to Sarah.

Mrs James then clicked on to the maths' circus programme. This involved clicking on to lions so they were in order of size. You can click on to different levels so it becomes more difficult. Mrs James asked Sarah to click on to the next level, then she said "Mrs James help you. I don't think you can do this".

In my fieldnotes I noted the use of simple language with joining words left out and the low expectation of what Sarah is capable of achieving. This



means Sarah can say activities are too hard when she cannot be bothered doing them, Mrs James's low expectations give Sarah a way out.

The teacher aide said to me "Her IEP from six months ago said she could only count to number three, I've got two more for her".

This comment by the teacher aide suggests that she can boost her status and confidence by Sarah's academic success. It seems as if the teacher aide is buying into the Banking theory of education, where the child is an empty vessel and the teacher has all the knowledge and deposits it into the child (Freire, 1972, p. 45).

The following examples show the language the teacher aide uses when speaking about Sarah. This incident occurred in the resource room.

The teacher aide then packed up all the materials and said to Sarah "Do you think you deserve a jellybean for working so well?". Sarah said "Yes blue, blue, blue". The teacher aide said "No not a blue jellybean I haven't got any left". She then said to me "Repetitive gets an idea in 'its' head. Do you find that?"

In this example, I did not answer the teacher aide's question because I did not want to talk about Sarah in front of her. In another example, the teacher aide said to me:

"Its got a sense of humour when it wants to". Mrs James got up and got Sarah a jellybean out of her filing cabinet.

The teacher aide uses the word "its" when referring to Sarah. It may be her intention to use this word so Sarah will not know that we are talking about her, however, even if this is the case the language is still de-humanising.

### *Responsibility*

The teacher aide who has had no training has taken or been given the primary responsibility for Sarah in certain contexts. As the following example shows, she takes it very seriously.

After lunch Sarah's teacher aide said to me "I had a dream last night that I lost Sarah and the teacher and I were looking for her. Emily

(another teacher on camp) came up and said "She's right here". I'd be in trouble if that happened because I'm responsible for her".

The only support available to her appears to be from the experts like the mainstream support person and yet my observations at Sarah's IEP meeting demonstrated that adequate support was not forthcoming. This example also highlights the teacher aide's justification for possessiveness over Sarah.

The application of the curriculum had an impact on the issue of responsibility for Sarah and added to its complexity. It became apparent that there were two curriculums, one in the resource room and one in the classroom. The teacher aide had ownership of the curriculum in the resource room, the teacher over the curriculum in the classroom. The teacher aide boosts her confidence by saying the important stuff is the academic stuff that goes on in the resource room as is shown in the two examples below.

When the assembly had finished we left the hall and went back over to the classroom. As we walked through the resource room, the teacher aide said to me "We'll go and check with the teacher and see if she is doing anything of importance".

The teacher aide said to me "The teacher was away last week so I have been helping the reliever in the classroom, so Sarah was doing things that could be done in the classroom like colouring in".

It seemed as if she was justifying to me the sort of work she does with Sarah and that she does not perceive that work in the classroom could be as 'academic' as what she does with Sarah in the resource room and that it is not possible to do academic work in the classroom. The teacher also confirmed this perception by saying "Sarah could be in the class the whole time if it wasn't for her own learning".

In contrast, on one occasion the teacher aide appeared to resist taking that responsibility for Sarah. The following conversation between the teacher aide and myself occurred before camp.

We then talked about the two hour tramp to the camp site. The teacher aide said "Sarah isn't doing the walk - it's too much responsibility". She said "You can do it though". I said "I'll wait and see how I feel, I could probably do with the exercise".

Although in this example, the teacher aide states that she does not want the responsibility of Sarah on the walk, indirectly she is still taking responsibility for her because she has made the decision that Sarah will not go on the walk. It also shows my status in the hierarchy. The teacher aide sees herself as having power over me which is shown by her giving me permission to do the walk.

### *Links to Friendship*

How do the issues of shadowing and gate-keeping by the teacher aide, the teacher aide's status, the language used by the teacher aide and the responsibility for Sarah link to and influence Sarah's social relationships with her peers?

There is a complex and complicated link between all of these factors. If Sarah is pulled-out of the classroom it firstly limits her opportunities to interact with other children in her class. Secondly, it highlights that Sarah is different from the other children in the class and implies that she is not as capable at doing work as they are. The teacher aide's low expectations perpetuates the idea that Sarah does not have the same status as the other children in the class, which of course affects the interactions and relationships between Sarah and her peers. The teacher aide's low expectations also justify the need for Sarah to be continually pulled out of the classroom.

The teacher aide does not see it as her role to facilitate friendships. She said to me "At this school we focus on the academic". It may be the case that the academic side of schooling is considered to be more important than social relationships but it also suggests a lack of awareness and education. The teacher aide needs to be made aware that just because she does not focus on friendship it does not mean that she is not influencing it.

As an observer I had sympathy for the teacher aide because she has been placed in the difficult position of being responsible for Sarah. She has low status, is undervalued in the school and has not had any training. The teacher aide however, cannot get past Sarah's disability label. She talks down to Sarah as though she is a pre-schooler who is incapable of any academic or intellectual thought. The teacher aide does not give Sarah work that is age-appropriate. She has low expectations, will not allow risk-taking and speaks to Sarah slowly and clearly and leaves out linking words. This suggests the assumption that because Sarah's verbal language is limited so is her

intellectual capacity. The third theme to be discussed is Sarah's social interactions and relationships with her peers.

### Sarah's Social Interactions and Relationships

I observed many different types of interactions between Sarah, her classroom peers and other children in the school. On camp away from the usual school structures and routine, Sarah was observed to be involved in play interactions with other children, usually girls and appeared to be an active participant in these interactions. At other times she was the helpee in helping types of interactions, and the student in teacher and student types of interactions. The other children took on the teacher role, especially in the classroom. I observed many interactions between Sarah and Leanne, another girl with a disability which seemed to be encouraged by staff. Sarah initiated many interactions with other children which were at times successful and at other times unsuccessful.

#### *Play Interactions*

In the afternoon Sarah went off to play a game where two children stand on a wobbly piece of wood that is only about six centimetres wide. The object is to hold on to a sack which is filled with soft material and use the sacks to knock each other off the plank. Sarah walked over to the game with Angela, their arms wrapped around each other. When it was Sarah's turn, a child would hold on to Sarah's waist to steady her balance. Angela and Sarah negotiated with the other children so they could play against each other rather than the winner playing the next in line.

This interaction was really neat to watch. It was interesting to see that when given the opportunity the children would adapt the rules of the game so Sarah could be an active participant. The teacher aide was not present and I was overseeing the game, although I tried not interrupt or interfere in their game in any way.

The following example also shows the children taking responsibility for Sarah in a different context.

I woke the next morning at 6.10am, Sarah's teacher aide was already up and was having a shower. I lay in bed for five minutes as the girls started to wake up. When Sarah woke up she said "Toilet, toilet." Hayley said "I'll take you, Sarah."

The teacher aide was still in the shower which meant that the children had the opportunity to interact with Sarah. They took more responsibility when the teacher aide was absent.

In the following examples, I was very excited because the scene was set to see many varied interactions between Sarah and five other children. On camp the children were to be involved in "Team Initiatives" when a group of six children had to work together to achieve a set goal. Originally I was the team leader because the teacher aide was away doing something else. However, she came over and assumed responsibility for the group without telling me so. In the first following example the group had to all stand on two planks of wood and all lift their legs at the same time so they could walk.

I said to the children "You need to teach Sarah. She is part of your group". Angela came up with the suggestion of holding out her arm (left or right) so Sarah could see what leg she had to lift. Angela tried this out and it worked until the teacher aide made them turn around. Angela said to the teacher aide "Sarah got it right until you made us change, then she got confused". The teacher aide ignored this comment.

In the following example, the group had to have one person climb up a pole and then have the other group members pass a tyre to that person to put it over the top of the pole.

This was very difficult. A number of the children tried climbing to the top of the pole but when they got to the top however the other group members found it difficult to pass the tyre because it was heavy and they were not tall enough. The children all had a turn and Sarah lined up with them. The teacher aide said to me "Sarah hasn't got a shit show of getting up there". The teacher aide did not expect Sarah to participate. She said "Sit down Sarah". I said "You help your team Sarah, you are the tallest", Angela then said "Come on, Sarah". Sarah got up and helped lift the tyre up to the person on the pole.

These two examples also show that the children are willing to adapt when given permission and the opportunity. It seemed that the teacher aide did not want Sarah to participate. It may have been easier for her to imply this rather than help the children to adapt so Sarah could be included. It may also

suggest that the teacher aide does not have the necessary skills or experience to do this. My frustration and anger was a response to the teacher aide's exclusion of Sarah, especially when the other children were willing to include her and the situation offered great potential for the children to see Sarah contribute. This example also shows me challenging the teacher aide's authority and power over me.

### *Helping*

I observed many instances of children, usually girls, helping Sarah in various ways. These interactions usually occurred in the classroom as in the following example.

Sarah arrives at school at 8.50am, I see her through the door putting her school bag away. Sarah comes into the classroom carrying a pile of books and papers and walks over to her desk. Tracy (who has a desk opposite Sarah) takes the pile of books off Sarah and puts them in her desk. There is no verbal communication between the two girls. Tracy runs off with two other girls.

This interaction involves Tracy getting Sarah organised rather than actively communicating and interacting around a social activity. This type of interaction was linked to children taking on the teacher role.

### *Teacher Role*

I observed many instances of children, usually girls taking on the teacher or teacher aide role when interacting with Sarah. These interactions usually occurred in the classroom and involved children who had desks in close vicinity to Sarah. In the following example the teacher aide had said something to Tracy that I could not hear and then left the room.

Sarah arrived in the classroom at 9.10am carrying a pile of books and her pencil case. Sarah looked at Tracy who sits opposite her and pointed to her nose and said "My nose". Tracy said "No" and pointed for Sarah to sit down. Sarah put away her books and sat down at her desk. I then heard Tracy say to Sarah "Mrs James will be back soon".

This interaction shows Tracy acknowledging that the teacher aide has primary responsibility for Sarah and that she was filling this role until the teacher aide returned. It also suggests that the teacher aide may have given Tracy permission to take on her role in her absence.

When Mr King was getting ready to leave, he asked Andrew to carry the over-head projector back to where it belonged. Andrew was trying to get past Sarah and he said to her "Excuse me, Sarah". Sarah tipped her chair forward to make more room but there was still not enough room for him to get past her. Tracy said to Sarah "Stand up Sarah", Sarah stood up and Andrew walked past. Tracy then said to Sarah "Sit at your desk" this was said in a tone of voice used by a teacher, it was not the same tone she used when talking to other classmates.

The children would take on the role typical of the teacher aide when she was out of the classroom. It was interesting that if the children told Sarah to do something she would do it straight away, if the teacher aide told Sarah to do something she would often have to repeat it before Sarah would comply. This suggests that the children in the class are more successful than the teacher aide at teaching Sarah the rules of the classroom. It may have been appropriate to make more use of peer-teaching in the classroom.

#### *Leanne and Sarah*

Leanne is the same age as Sarah and has a disability. The two girls spend a great deal of free time together, either playing on the jungle gyms or playing chasing. At lunchtime, they can usually be found sitting next to each other, eating their lunches. Their relationship is quite unique, Leanne is very vocal and voices her concerns to Sarah often talking like a teacher but Sarah uses her physical dominance to voice her concerns. It was a standing joke amongst the staff how accurately Leanne can mimic teacher and teacher aide behaviour and language. This relationship was encouraged by the teacher and the teacher aide.

Sarah is still sitting on the bars when Leanne comes over to the bars and sits by her. They chatter for a couple of minutes and I hear Leanne say "Sarah don't". A girl comes over and asks Sarah if she can ride on her shoulders. The girl gets on Sarah's shoulders and holds onto the monkey bars above her then Sarah walks slowly while the girl swings from bar to bar. When they reach the end of the bars, Leanne has a turn of being on the shoulders of the girl. Sarah indicates that she wants a turn of being on someone's shoulders so she tries to climb on to the girl's shoulders. The girl says "Sarah, you're too heavy. Ouch! Sarah", Leanne says "Sarah, you're too heavy". Sarah gets off the girl's shoulders and the girl gets back on Sarah's shoulders. Sarah starts to

walk fast and another girl says "Sarah go slow, go slow Sarah." This girl walks by Sarah, supporting the other girl in case she falls off. When they reach the end of the bars the girl hops off Sarah's shoulders. Sarah goes over to Leanne who says "No Sarah ask Nicola for a piggyback". Two younger girls come over to the bars and Leanne says "Go away girls."

This is a game that I observed Sarah and Leanne playing many times. In this instance they have included some other girls. These girls appeared to be a couple of years older than Sarah and Leanne. Sarah was very useful in this game because she is big and strong. As an observer I was unsure if Sarah was being taken advantage of or if she perceived she was being taken advantage of. The following interaction occurred during lunchtime at school.

After Sarah has put her lunch box away, she stands in the middle of the concrete area and yells out "Leanne". Leanne comes out of her classroom and comes over to Sarah. They sit on the rows of seats and play a hand game for about thirty seconds 'under the bambushes'. While they are playing a girl standing close by yells out to get a boy's attention. The girl looks over at Sarah and Leanne and does a handsign that I recognise to mean 'nuts' or 'mental'. Sarah and Leanne don't appear to have seen this.

This interaction shows the effects on Sarah's friendship activities of the school structure which always puts Sarah and Leanne together. It highlights that they are different and produces an "us" and "them" discourse and makes Sarah and Leanne the "them", the outsiders with disabilities.

#### *Sarah Initiating Interactions*

Sarah would often initiate interactions with her peers, both in the classroom and in the playground. These initiations were sometimes successful and at other times were rejected. The following two examples of Sarah initiating interactions occurred in the playground and involve children not in Sarah's class.

Sarah spots her teacher aide on duty and runs over to her. The teacher aide has three or four other children walking beside her. Sarah tries to grab the hand of a younger boy but he shrugs her off.



The bell went for lunch at 12.30pm. Sarah ran outside and went over to where all the other children were sitting on rows of wooden forms. Sarah went to sit down on a seat beside a girl but the girl put her leg over the seat so Sarah could not sit down.

In the playground the children who rejected Sarah's attempts to interact were usually children not in Sarah's class. The following example of Sarah initiating an interaction occurred in the classroom and shows how persistent she can be.

Mr King is talking to all the class, all of the children except Sarah are sitting down at their desks. Sarah is standing up. Tracy says to Sarah "Sit down." Sarah responds by sitting down. Mr King then hands out the children's books and asks them to cut out a picture of 'David'. He asks Tracy to give out scissors to each group - there are not enough scissors for one pair each. Sarah holds up her book to Amanda (who is at her group and is cutting out her picture) and says something but Amanda does not respond in any way. She does not look at Sarah nor does she say anything. Sarah says to Amanda "Amanda, Amanda, Amanda, scissors." Amanda continues to cut out her picture and ignores Sarah. A couple of minutes later Sarah reaches across to Amanda and says "Scissors", Tracy says "Sarah wait." Sarah is quiet and sits still watching the other children cut out their pictures.

### Conclusion

As described in this case study there were many types of social interactions and relationships observed between Sarah and her peers. These were influenced by opportunities available to the children to interact and by the larger theme of the school structure and role.

## CHAPTER SEVEN

### Conclusion

#### *Social Relationships*

##### *Case Study One*

In case study one the behavioural methodology used provided a very detailed account of behaviour in social interactions and showed that features of social interactions can be changed by intervention. This study also brought up questions about the influence of the context on social interactions, or in behavioural terms variables that could not be controlled. Behavioural methods did not allow these to be examined.

##### *Similarities and Differences between Case Study Two and Case Study Three*

There were themes that were common in both case studies two and three. The over-riding and most important and influential theme was the school structure and role. The model of disability used by these schools had an effect on the children's social relationships. These schools bought into the medical model of disability by focusing on the perceived deficits of the child. Other common themes included the low priority given to the development of social relationships, the issue of power, the teachers teaching style and classroom organisation, both girls initiating interactions and actively resisting exclusion rather than being passive. Further common themes included the opportunities for interactions being limited by the children being pulled out of the classroom for specialised services or to work with the teacher aide, children modelling the adults in the school setting as was shown by children taking on the teacher role but when given the opportunity were accepting in many instances and teachers' lacking responsibility for the education of their students with disabilities.

As presented above a common finding was that the teachers were not responsible for the child with the disability, this responsibility was devolved to the teacher aide. Bogdan and Knoll (1995) suggest that the 'mechanistic model of special education' has led to a situation in which the teacher has been reduced to an 'education technician' or 'behavioral engineer'. In these roles "the teacher cannot act in a professional and intelligent manner, for much is forbidden, much prescribed, and much so rigid that personal initiative is impossible" (p. 11). Instead there is the need for a "holistic, nonmechanistic approach to education, which prepares teachers to do what is meaningful in

the larger personal and academic life of their students" (Bogdan and Knoll, 1995, p. 678).

The role of the teacher aide was a common theme in the two case studies. Although I have been critical of them the problems I observed such as gate-keeping by the teacher aide were essentially a symptom of the overall theme of the schools' structure and their lack of responsibility for the children with disabilities. It also highlights the problems associated with funding teacher aides through the child with the disability because it creates a situation where the teacher aide seems to belong to that specific child. This necessitates the need for a change in both government funding and communication with parents about the role of the teacher aide. Sally's mother said to me "parents fight hard for their child's teacher aide hours, we don't like to see our child's teacher aide working with other children".

There were also differences between the two case studies. The setting in case study two was less inclusive, issues stood out and were repetitive (ie., reprimands for interacting). I did not therefore pick up on the more subtle influences on Sally's relationships in the setting. Because the opportunities for interactions were so limited this meant there was less data on interactions between children. The setting in case study three was more inclusive so I therefore picked up on more subtleties and indirect influences on Sarah's social relationships. There were more contradictions and complexities which makes things harder to understand and therefore more difficult to address. Because there were more opportunities for Sarah to interact I gathered a lot more data on the interactions between Sarah and other children in the school.

It is difficult to compare the conclusions from case study one with case study two and three because they were asking different questions. It seems inappropriate to make comparisons when the underlying paradigms are different.

### Methodological Approaches

#### *Implications of the Different Approaches*

Using a behavioural methodology the focus is always on the child with the disability and on specific units of behaviour. You look at the children and how they interact rather than being able to see the influences on causing the children to interact in a certain way. Unfortunately, this always places the 'problem' within the child with the disability. This means that interventions

or strategies to improve social relationships will always be focused on the child with the disability rather than on wider societal problems. Ballard (1993) has called for researchers to be "allies to disabled people who would change the focus of research away from labelled people and on the rest of society and problematic institutions" (p. 92).

Ballard (1993) has called for the focus of research to change. He says "The focus of research has predominantly been on people with disabilities, with little attention given to changes needed in school and community contexts" (p. 97). The intervention literature discussed earlier supports this suggestion with a significant number of the studies having an emphasis on individual change rather than information on how to change systems (Meyer, 1991, p. 637). Institutional practices that limit the opportunities for children with and without disabilities to form relationships are ignored. Ballard (1993) states that in disability research the "assumptions behind dominant models and ideologies are rarely questioned" (p. 100). He suggests that it is "time for some critical evaluation of disability research, including scrutiny of its culturally based assumptions and goals..." (p. 100).

The typical or traditional response to "this child needs friends" would be to implement a social skills programme in an attempt to achieve this. If the 'problem' could not be fixed, it would be perceived to be the child's personal 'problem'. The qualitative approach which looked at what is going on in these two settings highlights that it is not sufficient to implement a behavioural intervention which is only a bandaid for a larger issue. The findings from the two qualitative case studies suggest that the school institution and its structure and role in disability has the most influence on children's relationships.

Using a different methodological approach gave me the opportunity to answer different questions. I changed the focus by changing the research question. The child with the disability was no longer seen as the problem, instead I was looking at the whole school context. This meant that strategies and interventions could focus on these wider issues which highlights the need for the whole community to be educated on the benefits of inclusion.

Qualitative methodology however, has not been free of criticism. Although in this research I tried to give other people's perspectives the ultimate interpretation of what I observed and what people said was mine. With qualitative research there is always the possibility that the themes did not

emerge from the data but were imposed, I have left it to the reader to determine if the data represents what I interpreted it as representing. A further limitation was that I did not get the opportunity to interview teachers indepth, it may have been valuable to do member checks with them about emerging themes and specific incidents that I observed.

Bogdan and Taylor (1987) state that "to develop a full understanding of a sociology of acceptance we have to understand the other partner in the relationship as well" (p. 38). As a novice researcher Max, Sally and Sarah provided a real challenge. I did not succeed in interviewing them as it proved too difficult as they were essentially nonverbal and I was not knowledgeable about other communication systems. Unfortunately, this meant that I could not get their perspectives or definition of their social interactions and social relationships with other children at their school. Similarly, Lutfiyya (1990) had difficulties interviewing people with disabilities in her study of friendships and for one of her participants to collect the data she needed she interviewed someone who knew him well. I talked to the children's mothers about their child's social relationships.

#### *Validity and Reliability*

The method I used in case study one to ensure reliability is not appropriate for qualitative research. This is because the aim of establishing reliability in a quantitative study is to see to what extent the findings will be found again. In a qualitative study the aim is to see if the results are consistent with the data collected. To ensure reliability I carried out two things common to qualitative research, triangulation and I kept an audit trail. Triangulation refers to a study's use of a combination of sources of data. In these case studies I used informal interviews, document analysis and participant observations which meets the criterion of triangulation (Ferguson, 1987, p. 128). I also kept a detailed record of how I collected, handled and interpreted the data.

Again the method I used in case study one to ensure validity is not appropriate for qualitative research. The aim of validity in a quantitative study is to see how congruent one's findings are to 'reality'. In qualitative research there may be multiple perspectives of 'reality'. To ensure validity I engaged in peer and colleague examination. I talked to fellow students about my ideas and emerging themes. In my fieldnotes I wrote observer comments which highlighted my biases and assumptions and I also submersed myself in the field for a reasonable period of time.

The findings of qualitative research cannot be generalised in a statistical sense as in quantitative research. By conducting observations in two different schools it allows for "the range of relationships between students with and without disabilities, as well as the similarities across these relationships" to be described (Staub, Schwartz, Gallucci and Peck, 1994, p. 316). The similarities in the two settings can more likely be generalised to other settings. I have given the reader a thick description of the two settings so the reader can then decide how close the situation reflects their own situation (S. Merriam, personal communication, December 17, 1996).

As common at the conclusion of a study is the call for further research in the area. The data collected in these last two case studies was very rich with description. During data analysis many issues not directly related to social relationships were put aside at the coding stage. These issues could be used to form the basis of further study, they included:

- The IEP process - does the IEP have a direct influence on the curriculum the child receives?
- What is the role of the teacher aide in the classroom?
- What do schools do to attempt to educate parents of children without disabilities about disability?
- How does the teacher and the teacher aide define their relationship?
- What influence does the label 'severe disability' have on teacher and teacher aide's expectations?
- How do the teacher and the teacher aide define their relationships with outside professionals and experts?

Social relationships are very important because they contribute to quality of life, to functional participation in many community activities, to the reduction of challenging behaviours, and to the removal of social barriers (Haring, Haring, Breen, Romer & White, 1995, pp. 232-234). The success of community placement depends largely on the success of peer relationships (Murray-Seegert, 1989, p. 12). If children are educated alongside children with disabilities in the regular classroom and strategies are put in place to facilitate these social relationships, the outcomes can be positive and have benefits for all children. It is important that people have the necessary skills to form relationships and friendships with other people in the community, and that people in the community have the skills to form relationships with people with disabilities.

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## Appendix

Appendix A:	Human Ethics Committee Approval
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Appendix A: Human Ethics Committee Approval



University of Canterbury Private Bag 4800  
Christchurch New Zealand  
Telephone: 03-366 7001  
Fax: 03-364 2999

10 April 1995

Ms Rebecca Philips  
C/- Dr K Liberty  
Department of Education  
UNIVERSITY OF CANTERBURY

Dear Ms Philips

The Human Ethics Committee has considered and approved your research proposal 'Peer Relationship between Children with Disabilities and Children without Disabilities in Primary Schools (Christchurch)' subject to the following modifications: (a) attention is drawn to Guideline 4b - that consent of dependent persons should be obtained as far as possible and (b) a sentence be added to the Information Sheet indicating that children will not be required to participate (i.e. be observed) against their will.

The Committee asks that a copy of the revised Information Sheet be sent for the files.

Yours sincerely

A handwritten signature in cursive script, appearing to read 'J A Cockle'.

J A Cockle (Miss)  
Secretary

Appendix B: Education Department Research Supervision and Ethics  
Committee Approval



Education Department

University of Canterbury Private Bag 4800  
Christchurch New Zealand  
Telephone 03-366 7001  
Fax 03-364 2113

13 March 1995

Rebecca Philips  
51 Armagh Street  
CHRISTCHURCH

Dear Rebecca

Under advisement of the Departmental Research Supervision and Ethics Committee, I have reviewed your research proposal, "Peer relationships between children with disabilities and children without disabilities in primary schools".

As of the date above, you are granted **conditional approval to proceed** with your research, under the supervision of:

Kathleen Liberty (first supervisor), and  
Missy Morton (second supervisor).

However, it has been determined that this research requires prior approval of the University Human Subjects Ethics Committee. Please discuss the process for obtaining approval with your supervisor.

Once the proposal is approved by the University Human Subjects Ethics Committee, final approval will be granted by the Department. You will be responsible for submitting a copy of the letter from the Human Subjects Ethics Committee to me to obtain this final approval of your research.

Guidelines and regulations regarding your research in the Education Department are set out in the booklet "A Guide for Students Doing Research in the Education Department, 1995." Your research thesis is to be submitted on the due date as described in the booklet, a copy of which I have enclosed.

The Department extends its best wishes for your successful research.

Yours sincerely

Colin McGeorge  
HEAD OF DEPARTMENT

Encl.

cc: Departmental Research Supervision & Ethics Committee  
First Supervisor  
Second Supervisor

## Appendix C: Consent Form



Education Department

University of Canterbury Private Bag 4800  
Christchurch New Zealand  
Telephone 03-366 7001  
Fax 03-366 2413

### CONSENT FORM

#### **Peer relationships between children with disabilities and children without disabilities in primary schools**

I have read and understood the description of the above-named project. On this basis I agree to my child participating in the project, and I consent to publication of the results of the project with the understanding that anonymity will be preserved. I understand also that I may at any time withdraw from the project, including withdrawal of any information I have provided.

I agree to my child being observed in his/her classroom.

I agree to attend a meeting to discuss my goals for my child's peer relationships, and to attend a second meeting to discuss the planned interventions.

Signed.....Date.....

Name.....

Address.....

Contact Phone Number.....

School.....

Principal's Name.....

Teacher's Name.....

I have received an invitation to participate in this project but respectfully decline.

Signed.....

Date.....

Please return this form as soon as possible

**Thank You**

## Appendix D: Information Sheet



Education Department

University of Canterbury

Private Bag 4800

Christchurch, New Zealand

Telephone 03 366 7001

Fax 03 364 1413

### **INFORMATION SHEET**

Rebecca Philips, a post graduate student in the Education Department at the University of Canterbury invites you and your child to participate in her research on peer relationships between children with disabilities and children without disabilities in primary schools.

The aim of this project is to increase positive interactions between your child and other children in his/her mainstream class.

Your participation would involve attendance at a meeting to discuss your goals for your child's peer relationships. With your permission I would then observe your child in his/her classroom for about an hour a day, several days a week, for about three weeks. During this time I would record your child's interactions with his/her classroom peers. I would then meet with you and your child's teacher to discuss the data and to plan a way to improve or increase your child's interactions with others. Your approval at this time would be needed before any changes would be made. I would then assist in implementing the interventions. I will then analyse the data, the data would then be reviewed with you at the conclusion of the data collection.

As far as is possible consent will be obtained from your child. Your child will not be required to participate (i.e. be observed) against their will. If at any stage in the project your child objects to being a participant, their involvement will be discontinued.

The results of the project may be published, but you may be assured of the complete confidentiality of data gathered in this investigation: the identity of participants will not be made public without your consent. To ensure anonymity and confidentiality, data will be stored on computer disk and will only be made available to the researcher and her supervisor.

The project has been reviewed and approved by the University of Canterbury Human Ethics Committee. This research is being carried out under the supervision of Dr. Kathleen Liberty.

I can be contacted at home at 365 2366 or at Canterbury University on 366 7001 extn 8136. I will be pleased to discuss any concerns you may have about participation in the project.

I look forward to hearing from you.

Rebecca Philips

**Please keep this sheet for reference**

## Appendix E: Functional Analysis and Hypotheses

### Max's Initiations

The first analysis concerned the rate of initiations made by Max. The rate that Max initiated toward his peers during baseline was very low. During the eleven observation sessions, Max only initiated to his peers on three occasions. These all occurred in the classroom. Five hypotheses were then generated to explain this rate.

- 1.1) Max has a low rate of initiations because the time, place, or situation is not suitable for a response, the initiation is therefore not reinforced, so it is not likely to occur with any frequency.
- 1.2) Max has a low rate of initiations because children do not recognise the initiation so they do not reinforce it, so it is not likely to occur with any frequency.
- 1.3) Max has a low rate of initiations because Max's initiation behaviour is seen as negative (whether it was intended or not), therefore it is responded to negatively, so the behaviour is not likely to occur with any frequency.
- 1.4) Max has a low rate of initiations because the opportunities to initiate are not discriminated by Max.
- 1.5) Max has a low rate of initiations because Max does not have the initiation behaviour in his repertoire.

### Turn-Taking in Interactions

The second analysis concerned the rate of turn-taking. The rate of turn-taking during baseline was very low. Turn-taking gives information as to the complexity or sophistication of the social interaction. Four hypotheses were generated to explain this rate.

- 2.1) Max has a low rate of turn-taking because the initiator-child does not discriminate that Max has responded, so they are not positively reinforced and so the interaction is not likely to continue.
- 2.2) Max has a low rate of turn-taking because the time, situation or place of the interaction is not suitable for continued interaction.
- 2.3) Max has a low rate of turn-taking because another child or adult interrupts interactions.
- 2.4) Max has a low rate of turn-taking because Max's response is not appropriate for turn-taking.



### Rate of Responding

The third analysis concerned the rate of responding. The rate of responding observed during baseline was low. Four hypotheses were generated to explain this rate.

- 3.1) Max may respond to peers initiations but I do not recognise it.
- 3.2) Max does not always respond to peers initiations because the children do not give him an opportunity to respond (i.e., they leave before he has a chance to respond).
- 3.3) Max does not always respond to peers initiations because Max does not discriminate that the initiation should be responded to.
- 3.4) Max does not always respond to peers initiations because Max does not have the response behaviours well established in his repertoire.

### Duration of Interactions

The fourth analysis concerned the duration of interactions. The duration of interactions observed during baseline was short. The duration of the social interactions provides a measure of the overall degree of social involvement in a given context. Three hypotheses were generated to explain this rate.

- 4.1) The duration of interactions are short because the interactions are interrupted by another child or adult.
- 4.2) The duration of interactions are short because Max's responses or initiations are limited.
- 4.3) The duration of interactions are short because the interaction does not occur at the right time, situation, or place for it to continue.

The hypotheses were then ranked according to how important I felt they were in regard to social interactions and possible interventions. The top five ranked hypotheses are listed below.

- 1) Max has a low rate of turn-taking because the initiator child does not discriminate that Max has responded, so they are not positively reinforced and so the interaction is not likely to continue.
- 2) Max has a low rate of turn-taking because Max's response does not encourage turn-taking.
- 3) Max has a low rate of turn-taking because the place, time or situation is not suitable for continued interaction.

4) Max has better quality interactions when he and other children are involved in activities (story telling) because the children have a vehicle for interaction.

5) Max has better quality interactions in the absence of the teacher aide or other adult because the children then interact with Max rather than the teacher aide.

The top three ranked hypotheses relate to turn-taking. The first two hypotheses are related. The data shows that Max's responses are often just a look, or a smile, the children may not recognise these responses, or they may not see the responses as invitational to continue the interaction. A large number of the observed interactions appeared to fit into this category, it was therefore decided to devise an intervention based upon this information.

## Appendix F: Script and Lesson Plan

(Friday 24 November 1995)

Introduce Myself to the Class: Hello my name is Rebecca. Most of you would have seen me in your class for the last few weeks and today I've come to school so we can talk about Max and how we can understand him better.

Max has Cerebral Palsy: Max has cerebral palsy, he got cerebral palsy when he was a baby. After he was born Max stopped breathing and this caused some damage to his brain. This affects Max's muscles, it means Max is not able to use some of his muscles in his body in the same way that you can. Children who have cerebral palsy may not be able to walk, talk, eat or play in the same way that you can.

Max has Trouble Talking: Max has trouble talking because of his muscles. There are things being done to help Max learn to talk. Max goes to two special programmes, Speech therapy and Conductive Education where they are helping Max to learn to talk, walk, and do lots of other things.

When you can't speak you use other ways to talk. Max is learning to handpoint and eyepoint (so if you want to read Max a story you could show him two books and he can touch or look at the one he wants you to read). Max is also learning to nod 'yes', and shake his head 'no' when people ask him questions. We are now going to look at Max doing some of these things on video and talk about ways that you can help Max talk.

Video: This is Max smiling. When Max smiles it means he is happy or means 'yes' or is agreeing with you. Max would like you to talk to him. This is Max eyepointing and handpointing. See that he looks at and touches what he would like. You can give him what he is looking at, or you can talk about it.

This is Max shaking his head 'no'. You can say "Max I can see that you are nodding your head to say 'no'", then you can keep talking to him. This is Max talking. This means that Max wants to talk to you, you can talk back to him. Max also sometimes cries, this means he may be unhappy. You can tell him you will get help or you can ask him what is wrong. Max also sometimes nods his head for 'yes'. You can tell him that you can see him

nodding 'yes', you can then keep talking to him. Remember that it can take Max a long time to answer you, so you might have to be patient and wait a wee while for him to reply.

Show Them the Poster: I've made this poster to help you to remember what we've been talking about. Read out the poster. I want you to practice in the classroom and out on the playground. I will come and watch how you are going on Monday and Tuesday, and on Wednesday we will have a talk about it.

## Appendix G: Intervention Summary

(Friday 24 November 1995)

I arrived at school at 10.40am. I went into the classroom. Max is not at school on Wednesdays and Fridays. The television and video was already set up. The classroom was empty because it was playtime and all the children were outside. I found a seat for myself beside the television and video. I obtained a free-standing blackboard and hung up the poster, with the row of symbols showing.

The bell rang at 10.50am and all the children started to come inside. I told them all to sit on the mat facing me as we were going to have a talk. The teacher came in a few minutes later and told them all to sit down and be quiet because I was going to have a talk. They all quietened down and I started by asking them if anyone knew what my name was. Some of the children put up their hands, and some yelled out 'Rebecca'. I said yes that was right, and that most of them would have seen me in class over the last few weeks as I have been watching how they all play and talk. I then said that I was here to talk about Max and how we can understand him better. I asked if anyone knew what 'cerebral palsy' was? No one put up their hand. I explained what cerebral palsy was and how it affected Max (using and following the lesson plan). I said that Max was going to Speech & Language Therapy and Conductive Education to learn to talk, walk, eat and lots of other things. A boy yelled out that he also went to Speech Therapy. I replied that, "yes lots of children go to Speech Therapy". (I was sitting down for all of this introduction).

I then went to the poster and said that I was going to show them all the things that Max can do to 'talk' to us without words. I pointed to the hand symbol and asked them if they thought they knew what it meant. They put up their hands and yelled out 'hand', 'right hand'. I said that yes they were right it was a hand, but the hand means 'wait', this is because it takes longer for Max to reply. So it may be a good idea to count in your head 1-2-3-4-5, they had a practice.

I then pointed to the eye symbol and asked if anyone knew what this meant? Children called out that it was an eye. I said yes it was an eye, and that it means you have to look at Max when you are talking to him, because

it can be hard to see what he means. I said they have to be detectives to work out what Max might be saying.

I then pointed to the ear picture and asked if anyone knew what this meant? They called out 'ear', I said that yes it is and it means that it is very important to listen very carefully to Max because he uses his voice quietly. I then pointed to the pictures and they repeated what they meant "wait" - "look" - "listen".

I said Max has a lot of ways that he can "talk" to us. The first way is smiling. I have Max on video smiling. I turned it on and played it through twice. They laughed and went 'oohh'. I then rolled down the poster to smiling. I said this is Max smiling. When he smiles it means he is happy, and he would like you to talk to him.

I pointed to the poster and said that Max can eyepoint and handpoint and explained what they meant. I got Angela to sit on my chair and pretend to be Max. I said if you wanted to read Max a story you could hold up two books. Max might look at the book he wants or he might touch it. Angela touched the book she wanted, I said 'good girl' and she sat back down on the mat. I then showed the video twice and pointed out where Max looks at and touches what he wants.

I pointed to the poster to show the picture of Max shaking his head 'no' and nodding his head 'yes'. I showed the video twice of Max shaking his head 'no'. Angela yelled out that she heard Max say 'no'. I said that Max was learning to say 'yes' and 'no'.

I then showed them the picture of Max talking and repeated that Max was learning to say 'yes' and 'no' but that he also makes other sounds that mean that Max wants to talk to you and that you can talk to Max. I showed the video twice.

I rolled down the poster further and said that there was one more thing that Max can do to tell us how he is feeling. Does anyone know what it might be. They repeated some of the responses we had already talked about. I pulled out of my pocket the sad face and stuck it on the poster. I said we all cry sometimes don't we and we all know what it means. Michael yelled out 'sad', others yelled out 'crying'. I said this means Max is unhappy, you

could get help from the teacher aide or the teacher, or you could ask Max 'what is wrong?'

We went over the symbols again wait-look-listen. I said I want you to practice what we have been talking about. I will come back on Monday and Tuesday to see how you are going, and we'll have a talk about it on Wednesday. I then asked the teacher if we could find a space on the wall to hang up the poster, so we can look at it and remind ourselves. I then hung the poster up. Angela came over and gave me the clip that had fallen on the floor.

Duration: 25 minutes

Children present:

girls: 6

boys: 17

Appendix H: Social Interaction Recording Form

SOCIAL INTERACTION RECORDING FORM

DATE: \_\_\_\_\_ START TIME: \_\_\_\_\_ END TIME: \_\_\_\_\_ NAME: \_\_\_\_\_

TIME/CONTEXT/INITIATION/RESPONSE/T-T/NOTES/DURATION

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## Appendix I: Staff Presentation Summary

(7 December 1995)

### Present:

The Principal

Max's Teacher Aide

Teacher Aide who is a College of Education Student

Max's 1996 Teacher

Three other Female Teachers (J1 & J2 classes)

The principal introduced me to the staff and said that the staff may have seen me around the school doing observations. I introduced myself and said that I was working on my masters thesis. I started by discussing what my research was about. I said that I was looking at social interactions and social relationships of children with severe developmental disabilities. There were comments that this was a challenge because they were probably the hardest group of students to work with. I described and then passed around the observation form that I was using and then described what I was observing and what I recorded.

I tried to start the video that I had made of Max, but I could not get the video to work. Another teacher tried but was also unable to get it to work. I therefore only had the poster to discuss. I went through and discussed each of Max's responses shown on the poster and then described ways that children could respond to Max. We all talked about how these responses correspond to some of Max's IEP aims. I stressed that by the children responding to Max this reinforced Max for communicating. I said that I would also be observing next year, and that may be another intervention might be needed. We discussed resources and videos that the school had available on disabilities. Talk centered around a missing videotape.

12.55 - 1.15pm

Duration: 20 minutes

Appendix J: Dates, Setting, Times, and Duration of Each Observation

Observation	Date	Setting	Time	Duration
Teacher Interview	25/9/95	Classroom	2.10pm - 2.30pm	20 minutes
Parent Interview	28/9/95	Family Home	10am - 10.30am	30 minutes
Pre-visit	2/10/95	Classroom	9am - 10am	60 minutes
Baseline				
One	9/10/95	Classroom	9am - 10am	60 minutes
Two	10/10/95	Classroom	9am - 10am	60 minutes
Three	12/10/95	Classroom	9am - 10am	60 minutes
Four	16/10/95	Classroom	10.45am - 11.45am	60 minutes
Five	17/10/95	Classroom	10.45am - 11.45am	60 minutes
Six	19/10/95	Classroom	10.30am - 11.45am	75 minutes
Seven	23/10/95	Classroom	10.45am - 11.45am	60 minutes
Eight	26/10/95	Playground	12.30pm - 1.45pm	75 minutes
Nine	30/10/95	Playground	12.35pm - 1.35pm	60 minutes
Ten	16/11/95	Playground	12.30pm - 1.30pm	60 minutes
Eleven	21/11/95	Classroom	10.50am - 11.50am	60 minutes
Parent Interview	22/11/95	Family Home	12noon - 12.30pm	30 minutes
Intervention	24/11/95	Classroom	10.40am - 11.05am	25 minutes
Follow-Up Intervention	29/11/95	Classroom	8.45am - 10.15am	90 minutes
Intervention				
One	27/11/95	Classroom	9am - 10am	60 minutes
Two	28/11/95	Playground	12.40pm - 1.40pm	60 minutes
Three	30/11/95	Playground	12.35pm - 1.35pm	60 minutes
Four	4/12/95	Classroom	9.15am - 10.15am	60 minutes
Five	5/12/95	Playground	12.45pm - 1.25pm	40 minutes
Staff Presentation	7/12/95	Resource Room	12.55pm - 1.15pm	20 minutes
Six	7/12/95	Classroom	11.25am - 11.45am	20 minutes
Eight	11/12/95	Classroom	11.15am - 12noon	45 minutes
Nine	12/12/95	Classroom	9.15am - 10.15am	60 minutes
Follow-Up				
One	12/2/96	Classroom	9.10am - 10.10am	60 minutes
Two	14/2/96	Classroom	8.56am - 9.56am	60 minutes
Three	15/2/96	Playground	12.30pm - 1.30pm	60 minutes
Four	15/2/96	Classroom	1.50pm - 2.45pm	55 minutes
Five	20/2/96	Classroom	9.10am - 10.10am	60 minutes
Six	12/3/96	Playground	12.30pm - 1.30pm	60 minutes

Appendix K: Dates, Setting, Time and Duration of Each Observation

Observation	Date	Setting	Time	Duration
Parent Interview	23/1/96	Parents Home	10am - 11am	60 minutes
Pre-visit	13/2/96	Principals Office and Classroom	9.30am - 10.30am	60 minutes
One	15/2/96	Classroom	9.01am - 10.01am	60 minutes
Two	21/2/96	Classroom	9.03am - 10.03am	60 minutes
Three	23/2/96	Classroom	10.50am - 11.50am	60 minutes
Four	26/2/96	Playground	12.30pm - 1.30pm	60 minutes
Five	1/3/96	Playground	12.30pm - 1.30pm	60 minutes
Six	4/3/96	Classroom	9am - 10am	60 minutes
Seven	5/3/96	Classroom	9.05am - 10.05am	60 minutes
Eight	8/3/96	Playground	12.30pm - 1.30pm	60 minutes
Nine	12/3/96	Classroom	9.30am - 10.30am	60 minutes
Ten	18/3/96	Classroom	10.50am - 11.30am	40 minutes
Eleven	19/3/96	Playground	12.30pm-1.30pm	60 minutes
Parent Interview	21/3/96	Parents Home	10am - 11am	60 minutes
Twelve	15/4/96	Classroom	9.35am - 10.30am	55 minutes
Thirteen	16/4/96	Playground	12.35am - 1.30am	55 minutes
Fourteen	8/10/96	Classroom	8.45am - 10.35am	110 minutes
Fifteen	9/10/96	Playground	12.30pm - 12.40pm	10 minutes
Sixteen	11/10/96	Playground	12.30pm - 1.30pm	60 minutes
Seventeen	15/10/96	Classroom	8.55am - 10am	65 minutes
Eighteen	30/10/96	Playground	12.30pm - 1.30pm	60 minutes
Nineteen	14/11/96	Playground	12.30pm - 1.25pm	55 minutes
Twenty	20/11/96	Playground	12.30pm - 1.30pm	60 minutes
Twenty-One	21/11/96	Playground	12.30pm - 1.30pm	60 minutes
Twenty-Two	22/11/96	Playground	12.30pm - 1.30pm	60 minutes

## Appendix L: Case Study Two Codes

- 1) Being Invisible (by the teacher and the children)
- 2) Toileting
- 3) Responsibility (friendship does not come into it)
- 4) Non-Compliance or Resistance (depending on perspective taken)
- 5) Winners and Losers  
(The teacher aide always the winner and Sally always the loser)
- 6) Us and Them  
(constituted by school organisation and its rules and routines)
- 7) "No Touching" (it is considered deviant)
- 8) Safety
- 9) "Good" and "Bad" schools
- 10) Rules for all (staff and children)
- 11) Justification for Actions by T/A
- 12) Function of Schooling
- 13) Roles (clearly defined within the school)
- 14) "Us" and "Them" Discourse
- 15) Hierarchy:  
(Teachers over the kids, teacher over the teacher aide, teacher and teacher aide over the kids, kids without disabilities over kids with disabilities)
- 16) "Sally has to push herself"
- 17) Modelling Teacher Behaviour (rules)
- 18) Informal Designated Areas for "Us" and "Them"  
(classroom & playground)
- 19) Seeking Praise and Teacher Attention
- 20) Modelling Teacher Language
- 21) Low Status Kids Given Power
- 22) "No Talking"
- 23) Threatening by the use of Power
- 24) Power
- 25) Interaction Between Kids with and without Disabilities
- 26) Interaction Between Kids with Disabilities
- 27) Reprimand for Interacting
- 28) Sally Initiating Interactions
- 29) Interactions Terminated
- 30) Physical Barriers to Interaction for Kids with and without Disabilities
- 31) Dislike Job

- 32) Talking About the Children in Front of Them
- 33) Knowledge About the Children with Disabilities
- 34) Routine
- 35) One-to-One with Teacher Aide
- 36) Punishment
- 37) Adults Mediating Interactions
- 38) Authority
- 39) Formal Designated Areas for "Us" and "Them"
- 40) Eating

Appendix M: Dates, Setting, Time and Duration of Each Observation

Observations	Date	Setting	Time	Duration
Parent Interview	31/10/95	Parents Home	10am - 11am	60 minutes
Teacher aide interview	14/3/96	Teacher Aides Office	8.45am - 9.15am	30 minutes
One	15/3/96	Classroom	10.50am-11.50am	60 minutes
Two	18/3/96	Playground	12.15pm - 1pm	45 minutes
Three	19/3/96	Classroom	10.50am - 11.50am	60 minutes
Four	22/3/96	Playground	12 noon - 1pm	60 minutes
Five	26/3/96	Classroom	10.50am - 11.50am	60 minutes
Six	16/4/96	Classroom	10.48am - 11.40am	52 minutes
Seven	17/4/96	Playground	12.10pm - 12.55pm	45 minutes
Eight	25/6/96	Classroom	10.45am - 11.40am	55 minutes
Nine	26/6/96	Playground	12.10pm - 12.55pm	45 minutes
Ten	11/10/96	Classroom	8.15am - 10.15am	120 minutes
Eleven	14/10/96	Playground	12.15pm - 1.15pm	60 minutes
Twelve	17/10/96	Classroom	8.35am - 10.05am	90 minutes
Parent Interview	21/10/96	Parents Home	2.10pm - 2.55pm	45 minutes
Thirteen	22/10/96	Classroom	8.30am - 10.20am	110 minutes
Fourteen	31/10/96	Classroom	8.45am - 10.40am	115 minutes
Fifteen	4/11/96	School Camp	all day and night	
Sixteen	5/11/96	School Camp	all day	
Seventeen	12/11/96	IEP Meeting	1.30pm - 2.55pm	85 minutes

### Appendix N: Case Study Three Codes

- 1) Teacher aide status
- 2) Teacher aide responsible for Sarah
- 3) No risk-taking
- 4) Teacher aide perceptions of her status reflected through Sarah's behaviour
- 5) Teacher aide is a barrier to integration with other kids
- 6) Sarah is teacher aides possession
- 7) Ownership of Sarah
- 8) Sarah not allowed to fail
- 9) Low expectations
- 10) Simplified language (miss out linking words/slow/clear)
- 11) Sarah's limited language - assumptions that limited mental capacity
- 12) Not age-appropriate
- 13) Makes allowances "cotton-wool" syndrome/"molly-coddling"
- 14) Teacher aide threatened by:
  - a) her own lack of confidence
  - b) knowledge of others
  - c) others interacting with Sarah (Tania's mother)
- 15) Productivity equals:
  - a) on task
  - b) work completed quickly
  - c) correctly (but low expectations)
- 16) Differences highlighted and extenuated (not celebrated)
- 17) Resistance to exclusion
- 18) Desire to be included
- 19) Her disability generalised to all areas (resulting in exclusion)
  - a) walking
  - b) academic work
- 20) Teacher not threatened - has more power than the teacher aide
- 21) Teacher aide threatened by me - power struggle
- 22) Mainstream support person - invisible
- 23) Previous teacher aide - provide a voice
- 24) Willing to adapt - but opportunity needed
- 25) Children not listened to
- 26) Helping interactions
- 27) Play interactions
- 28) Children taking responsibility
- 29) Taking on the teacher role

- 30) Leanne and Sarah
- 31) Sarah initiating interactions
- 32) Parents must be grateful (therefore have low expectations)
- 33) Ownership of disability is with outside experts  
(school not taking responsibility)
- 34) Outside professionals are the experts (support needed but not provided)